

07/2012

Ilmub üks kord kuus alates 1993. aastast

# EVS TEATAJA

Uued Eesti standardid

Standardikavandite arvamusküsitlus

Asendatud või tühistatud Eesti standardid

Algupäraste standardite koostamine ja ülevaatus

Standardite tõlked kommenteerimisel

Uued harmoneeritud standardid

Standardipealkirjade muutmine

Uued eestikeelsed standardid

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## HARMONEERITUD STANDARDID

Toote nõuetele vastavuse seaduse kohaselt avaldab Eesti Standardikeskus oma veebilehel ja ametlikus väljaandes teavet harmoneeritud standardeid ülevõtvate Eesti standardite kohta.

Harmoneeritud standardiks nimetatakse EÜ direktiivide kontekstis Euroopa Komisjoni mandaadi alusel Euroopa standardimisorganisatsioonide koostatud ja vastu võetud standardit.

Harmoneeritud standardite kasutamise korral eeldatakse enamiku vastavate direktiivide mõistes, et standardi kohaselt valmistatud toode täidab direktiivi olulisi nõudeid ning on seega reeglina kõige lihtsam viis tõendada direktiivide oluliste nõuete täitmist. Harmoneeritud standardi täpne tähendus ja õiguslik staatus tuleneb siiski iga direktiivi tekstist eraldi ning võib direktiivist olenevalt erineda.

Lisainfo:

<http://www.newapproach.org/>

<http://ec.europa.eu/enterprise/policies/european-standards/harmonised-standards/>

Eesti Standardikeskus avaldab ametlikus väljaandes harmoneeritud standardeid ülevõtvate Eesti standardite kohta järgmist infot:

- harmoneeritud standardi staatuse saanud Eesti standardid
- harmoneeritud standardi staatuses olevate Eesti standardite kohta avaldatud märkused ja hoiatused, mida tuleb standardite järgimisel arvestada
- harmoneeritud standardi staatuse kaotanud Eesti standardid

Info esitatakse vastavate direktiivide kaupa.

## HARMONEERITUD STANDARDEID ÜLEVÕTVAD EESTI STANDARDID

Direktiiv 2006/42/EÜ

Masinad

(EL Teataja 2012/C 159/01)

Harmoneeritud standardit ülevõtva Eesti standardi tähis ja pealkiri	Kuupäev, millal Eesti standardi aluseks oleva Euroopa standardi kohta on avaldatud viide EL Teatajas	Viide asendatavale Eesti standardile	Kuupäev, mil asendatava standardi järgimisest tulenev vastavuseeldus kaotab kehtivuse Märkus 1
EVS-EN 940:2009+A1:2012 Puidutötlusmasinate ohutus. Kombineeritud puidutötlusmasinad KONSOLIDEERITUD TEKST / <i>Safety of woodworking machines - Combined woodworking machines CONSOLIDATED TEXT</i>	05.06.2012	EVS-EN 940:2009 Märkus 2.1	31.08.2012
EVS-EN 1034-8:2012 Masinate ohutus. Ohutusnõuded paberivalmistus- ja viimistlusmasinate projekteerimisele ja ehitamisele. Osa 8: Tooraine töötlemisagregaadid / <i>Safety of machinery - Safety requirements for the design and construction of paper making and finishing machines - Part 8: Refining plants</i>	05.06.2012		

EVS-EN 1034-16:2012 Masinate ohutus. Ohutusnõuded paberivalmistus- ja viimistlusmasinate projekteerimisele ja ehitamisele. Osa 16: Paberi- ja papimasinad / <i>Safety of machinery - Safety requirements for the design and construction of paper making and finishing machines - Part 16: Paper and board making machines</i>	05.06.2012		
EVS-EN 1870-4:2012 Puidutöötlemismasinate ohutus. Ketassaagimisseadmed. Osa 4: Lintsaagimismasinad käsitsi etteande ja/või väljajooksuga / <i>Safety of woodworking machines - Circular sawing machines - Part 4: Multiblade rip sawing machines with manual loading and/or unloading</i>	05.06.2012	EVS-EN 1870-4:2001+A1:2009 Märkus 2.1	30.09.2012
EVS-EN 1870-13:2007+A2:2012 Puidutöötlemismasinate ohutus. Ketassaagimisseadmed. Osa 13: Horisontaalasetusega saeraamid KONSOLIDEERITUD TEKST / <i>Safety of woodworking machines - Circular sawing machines - Part 13: Horizontal beam panel sawing machines CONSOLIDATED TEXT</i>	05.06.2012	EVS-EN 1870-13:2007+A1:2009	
EVS-EN 1870-14:2007+A2:2012 Puidutöötlemismasinate ohutus. Ketassaagimisseadmed. Osa 14: Vertikaalasetusega saeraam KONSOLIDEERITUD TEKST / <i>Safety of woodworking machines - Circular sawing machines - Part 14: Vertical panel sawing machines CONSOLIDATED TEXT</i>	05.06.2012	EVS-EN 1870-14:2007+A1:2009	
EVS-EN ISO 3745:2012 Akustika. Heliallikate helivõimsustaseme ja helienergiataseme määramine helirõhu abil. Täppismeetodid kajavabades ja helipeegeldava põrandaga ruumides (ISO 3745:2012) / <i>Acoustics - Determination of sound power levels and sound energy levels of noise sources using sound pressure - Precision methods for anechoic rooms and hemi-anechoic rooms (ISO 3745:2012)</i>	05.06.2012	EVS-EN ISO 3745:2009 Märkus 2.1	30.09.2012
EVS-EN 13001-2:2011/AC:2012 Kraanad. Üldine ehitus. Osa 2: Koormus efektid / <i>Crane safety - General design - Part 2: Load actions</i>	05.06.2012		
EVS-EN 13001-3-1:2012 Kraanad. Üldine ehitus. Osa 3-1: Teraskonstruktsioonide piiriseisundid ja sobivuse tõestus / <i>Cranes - General Design - Part 3-1: Limit States and proof competence of steel structure</i>	05.06.2012		
EVS-EN 15949:2012 Masinate ohutus. Ohutusnõuded varraste, ehitusterase ja terastraadi valtsimismasinatele / <i>Safety of machinery - Safety requirements for bar mills, structural steel mills and wire rod mills</i>	05.06.2012		
EVS-EN 50580:2012 Elektrimootoriga töötavate käeshoitavate tööriistade ohutus. Erinõuded püstolpihustitele / <i>Safety of hand-held electric motor operated tools - Particular requirements for spray guns</i>	05.06.2012		
EVS-EN 60335-1:2012 Majapidamis- ja muud taolised elektriseadmed. Ohutus. Osa 1: Üldnõuded / <i>Household and similar electrical appliances - Safety - Part 1: General requirements</i>	05.06.2012	EVS-EN 60335-1:2003 ja selle muudatused Märkus 2.1	21.11.2014

Märkus 1: Tavaliselt on kuupäevaks, mil asendatava standardi järgimisest tulenev vastavuseeldus kehtivuse kaotab, Euroopa standardiorganisatsiooni kehtestatud tühistamiskuupäev, kuid kõnealuste standardite kasutajate tähelepanu juhitakse asjaolule, et teataval erandjuhtudel võib olla ka teisiti.

Märkus 2.1: Uue (või muudetud) standardi käsitusala on samasugune nagu asendataval standardil. Osutatud kuupäeval kaotab kehtivuse asendatava standardi järgimisest tulenev vastavuseeldus direktiivi oluliste nõuetega.

**Direktiiv 89/106/EMÜ**  
**Ehitustooted**  
(EL Teataja 2012/C 123/02)

<b>Harmoneeritud standardit ülevõtva Eesti standardi tähis ja pealkiri</b>	<b>Kuupäev, millal Eesti standardi aluseks oleva Euroopa standardi kohta on avaldatud viide EL Teatajas</b>	<b>Viide asendatavale Eesti standardile</b>	<b>Tähtaeg, mil standard on rakendatav harmoneeritud standardina</b>	<b>Koos-eksisteerimis-perioodi lõpptähtaeg Märkus 4</b>
EVS-EN 54-25:2008/AC:2012 Automaatne tulekahju-signalisatsioonisüsteem. Osa 25: Raadiolinke kasutatavad komponendid ja nõuded süsteemidele / <i>Fire detection and fire alarm systems - Part 25: Components using radio links</i>	19.06.2012			
EVS-EN 197-1:2011 Tsement. Osa 1: Harilike tsementide koostis, spetsifikatsioonid ja vastavuskriteeriumid / <i>Cement - Part 1: Composition, specifications and conformity criteria for common cements</i>	19.06.2012	EVS-EN 197-1:2002 EVS-EN 197-4:2006	01.07.2012	01.07.2013
EVS-EN 490:2011 Betonist rea- ja erikatusekivid katuste katmiseks ja seinte vooderdamiseks. Spetsifikatsioon / <i>Concrete roofing tiles and fittings for roof covering and wall cladding - Product specifications</i>	19.06.2012	EVS-EN 490:2006	01.08.2012	01.08.2012
EVS-EN 681-3:2000/A2:2005 Elastsed tihendid. Materjalinõuded vee- ja kuivendusrakendustes kasutatavatele toruliidete tihenditele . Osa 3: Vulkaniseeritud kummi poorsed materjalid / <i>Elastomeric seals - Material requirements for pipe joint seals used in water and drainage applications - Part 3: Cellular materials of vulcanized rubber</i>	19.06.2012	Märkus 3	01.07.2012	01.07.2012
EVS-EN 681-4:2000/A2:2005 Elastsed tihendid. Materjalinõuded vee- ja kuivendusrakendustes kasutatavatele toruliidete tihenditele . Osa 4: Valupoliüuretaanist tihenduselemendid / <i>Elastomeric seals - Material requirements for pipe joint seals used in water and drainage applications - 4: Cast polyurethane sealing elements</i>	19.06.2012	Märkus 3	01.07.2012	01.07.2012

EVS-EN 682:2002/A1:2005 Elastsed tihendid. Materjalinõuded gaasi- ja vedelate süsivesinike torustike tihenditele / <i>Elastomeric seals - Materials requirements for seals used in pipes and fittings carrying gas and hydrocarbon fluids</i>	19.06.2012	Märkus 3	01.07.2012	01.07.2012
EVS-EN 997:2012 Hüdrolokuga WC potid ja seadmed / <i>WC pans and WC suites with integral trap</i>	19.06.2012	EVS-EN 997:2003	01.12.2012	01.06.2013
EVS-EN 1090-1:2009+A1:2011 Teras- ja alumiiniumkonstruktsioonide valmistamine. Osa 1: Kandeelementide vastavushindamine / <i>Execution of steel structures and aluminium structures - Part 1: Requirements for conformity assessment of structural components</i>	19.06.2012	EVS-EN 1090-1:2009	01.09.2012	01.07.2014
EVS-EN 1168:2006+A3:2011 Betonvalmistooted. Õõnespaneelid KONSOLIDEERITUD TEKST / <i>Precast concrete products - Hollow core slabs CONSOLIDATED TEXT</i>	19.06.2012	EVS-EN 1168:2006+A2:2009	01.07.2012	01.07.2013
EVS-EN 1317-5:2007+A2:2012 Teepiirdesüsteemid. Osa 5: Sõidukiirdesüsteemide toodetele esitatavad nõuded ja vastavushindamine KONSOLIDEERITUD TEKST / <i>Road restraint systems - Part 5: Product requirements and evaluation of conformity for vehicle restraint systems CONSOLIDATED TEXT</i>	19.06.2012	EVS-EN 1317-5:2007+A1:2008	01.01.2013	01.01.2013
EVS-EN 1423:2012 Teemärgistusmaterjalid. Pealepuistematerjalid. Klaaskuulid, libisemisvastased materjalid ja nende segud / <i>Road marking materials - Drop on materials - Glass beads, antiskid aggregates and mixtures of the two</i>	19.06.2012	EVS-EN 1423:2007	01.11.2012	01.11.2012
EVS-EN 1457-1:2012 Korstnad. Keraamilised lõõrid. Osa 1: Kuivades tingimustes kasutatavad lõõrivooderdised. Nõuded ja katsemeetodid / <i>Chimneys - Clay/ceramic flue liners - Part 1: Flue liners operating under dry conditions - Requirements and test methods</i>	19.06.2012	EVS-EN 1457:1999	01.11.2012	01.11.2013
EVS-EN 1457-2:2012 Korstnad. Keraamilised lõõrid. Osa 2: Märjades tingimustes kasutatavad lõõrivooderdised. Nõuded ja katsemeetodid / <i>Chimneys - Clay ceramic flue liners - Part 2: Flue liners operating under wet conditions - Requirements and test methods</i>	19.06.2012	EVS-EN 1457:1999	01.11.2012	01.11.2013
EVS-EN 12839:2012 Betonvalmistooted. Piirdeaedade elemendid / <i>Precast concrete products - Elements for fences</i>	19.06.2012	EVS-EN 12839:2002	01.10.2012	01.10.2013

EVS-EN 13224:2011 Betonvalmistooted. Ribipaneelid / <i>Precast concrete products - Ribbed floor elements</i>	19.06.2012	EVS-EN 13224:2004+ A1:2007	01.08.2012	01.08.2013
EVS-EN 14844:2006+A2:2011 Betonvalmistooted. Truubid KONSOLIDEERITUD TEKST / <i>Precast concrete products - Box culverts CONSOLIDATED TEXT</i>	19.06.2012	EVS-EN 14844:2006+ A1:2008	01.09.2012	01.09.2013
EVS-EN 15050:2007+A1:2012 Betonvalmistooted. Sillaelemendid / <i>Precast concrete products - Bridge elements</i>	19.06.2012	EVS-EN 15050:2007	01.12.2012	01.12.2012
EVS-EN 15102:2007+A1:2011 Dekoratiivsed seinakatted.Tahvel- ja rullkatted / <i>Decorative wall coverings - Roll and panel form</i>	19.06.2012	EVS-EN 15102:2007	01.07.2012	01.07.2012

Märkus 3: Muudatuse puhul on viitestandard EVS-EN CCCCC:AAAA, vajaduse korral selle varasemad muudatused ja osutatud uus muudatus. Asendatav standard koosneb seega standardist EVS-EN CCCCC:AAAA ja vajaduse korral selle varasematest muudatustest, kuid ei hõlma osutatud uut muudatust. Osutatud kuupäeval kaotab kehtivuse asendatava standardi järgimisest tulenev vastavuseeldus direktiivi oluliste nõuetega.

Märkus 4: Kooseksisteerimisperioodi lõpu kuupäev on sama, mis harmoneeritud standardiga vastuolus oleva rahvusliku tehnilise kirjelduse kehtetuks tunnistamise kuupäev, pärast mida on toote nõuetele vastavuse tõendamise aluseks harmoneeritud Euroopa tehniline kirjeldus (harmoneeritud standard või Euroopa tehniline tunnustus), mis on kättesaadav Euroopa Komisjoni ja NANDO infosüsteemi lehel <http://ec.europa.eu/enterprise/newapproach/nando/index.cfm?fuseaction=cpd>. hs. Kui harmoneeritud standard asendatakse uue versiooniga, võib mõlemat standardi versiooni kasutada CE-vastavusmärgise saamise alusena kuni kooseksisteerimisperioodi lõpuni.

## UUED STANDARDID, TÜHISTATUD STANDARDID JA KAVANDID ARVAMUSKÜSITLUSEKS

EVS Teataja avaldab andmed möödunud kuu jooksul vastuvõetud, tühistatud ja asendatud Eesti standarditest ja standardilaadsetest dokumentidest ning avalikuks arvamusküsitluseks esitatud standardikavanditest rahvusvahelise standardite klassifikaatori (ICS) järgi. Samas jaotises on toodud andmed nii eesti keeles avaldatud kui ka ümbertrüki meetodil või jõustumisteatega ingliskeelsetena Eesti standarditeks vastuvõetud rahvusvahelistest ja Euroopa standarditest.

Eesmärgiga tagada standardite vastuvõtmine, järgides konsensuse põhimõtteid, peab standardite vastuvõtmisele eelnema standardikavandite avalik arvamusküsitlus, milleks ettenähtud perioodi jooksul (reeglina 2 kuud) on asjast huvitatuil võimalik tutvuda standardikavanditega, esitada kommentaare ning teha ettepanekuid parandusteks. Eriti oodatud teave kui rahvusvahelist või Euroopa standardikavandit ei peaks vastu võtma Eesti standardiks (vastuolu Eesti õigusaktidega, pole Eestis rakendatav jt põhjustel)

Arvamusküsitlusele on esitatud:

1. Euroopa ja rahvusvahelised standardikavandid, mis on kavas vastu võtta Eesti standarditeks jõustumisteate või ümbertrüki meetodil.
2. Eesti algupäraseid standardikavandid.

Arvamusküsitlusel olevate dokumentide loetelus on esitatud järgnev informatsioon standardikavandite kohta:

- Tähis
- Euroopa või rahvusvahelise alusdokumendi-tähis, selle olemasolul
- Arvamuste esitamise tähtaeg
- Pealkiri
- Käsitlusala
- Keelsus (en=inglise; et=eesti)
- Asendusseos, selle olemasolul

Kavanditega tutvumiseks palume saata vastav teade aadressile [standardiosakond@evs.ee](mailto:standardiosakond@evs.ee), kavandeid saab osta klienditeenindusest [standard@evs.ee](mailto:standard@evs.ee).



# ICS PÕHIRÜHMAD

## ICS Nimetus

- 01 Üldküsimumused. Terminoloogia. Standardimine. Dokumentatsioon
- 03 Teenused. Ettevõtte organiseerimine, juhtimine ja kvaliteet. Haldus. Transport. Sotsioloogia
- 07 Matemaatika. Loodusteadused
- 11 Tervisehooldus
- 13 Keskkonna- ja tervisekaitse. Ohutus
- 17 Metroloogia ja mõõtmine. Füüsilised nähtused
- 19 Katsetamine
- 21 Üldkasutatavad masinad ja nende osad
- 23 Üldkasutatavad hüdro- ja pneumosüsteemid ja nende osad
- 25 Tootmistehnoloogia
- 27 Elektri- ja soojusenergeetika
- 29 Elektrotehnika
- 31 Elektroonika
- 33 Sidetehnika
- 35 Infotehnoloogia. Kontoriseadmed
- 37 Visuaaltehnika
- 39 Täppismehaanika. Juvelitooted
- 43 Maanteeõidukite ehitus
- 45 Raudteetehnika
- 47 Laevaehitus ja mereehitised
- 49 Lennundus ja kosmosetehnika
- 53 Tõste- ja teisaldusseadmed
- 55 Pakendamine ja kaupade jaotussüsteemid
- 59 Tekstiili- ja nahatehnoloogia
- 61 Rõivatööstus
- 65 Põllumajandus
- 67 Toiduainete tehnoloogia
- 71 Keemiline tehnoloogia
- 73 Mäendus ja maavarad
- 75 Nafta ja naftatehnoloogia
- 77 Metallurgia
- 79 Puidutehnoloogia
- 81 Klaasi- ja keraamikatööstus
- 83 Kummi- ja plastitööstus
- 85 Paberitehnoloogia
- 87 Värvide ja värvainete tööstus
- 91 Ehitusmaterjalid ja ehitus
- 93 Rajatised
- 95 Sõjatehnika
- 97 Olme. Meelelahutus. Sport
- 99 Muud

## **01 ÜLDKÜSIMUSED. TERMINOLOOGIA. STANDARDIMINE. DOKUMENTATSIOON**

### **UUED STANDARDID JA PUBLIKATSIOONID**

#### **EVS-EN 934-2:2009+A1:2012**

Hind 12,51

Identne EN 934-2:2009+A1:2012

#### **Betooni, mördi ja süstmördi keemilised lisandid. Osa 2: Betooni keemilised lisandid. Määratlused, nõuded, vastavus, tähistus ja sildistus KONSOLIDEERITUD TEKST**

This European Standard specifies definitions and requirements for admixtures for use in concrete. It covers admixtures for plain, reinforced and prestressed concrete which are used in site mixed, ready mixed concrete and precast concrete. The performance requirements in this standard apply to admixtures used in concrete of normal consistence. They may not be applicable to admixtures intended for other types of concrete such as semi-dry and earth moist mixes. Provisions governing the practical application of admixtures in the production of concrete, i.e. requirements concerning composition, mixing, placing, curing etc. of concrete containing admixtures are not part of this standard.

Keel en

Asendab EVS-EN 934-2:2009

#### **EVS-EN 12258-1:2012**

Hind 27,7

Identne EN 12258-1:2012

#### **Alumiinium ja alumiiniumisulamid. Tingimused ja määratlused. Osa 1: Üldterminid**

This European Standard defines general terms relating to products of aluminium and aluminium alloys which are helpful for communication within the aluminium industry and with its customers. It includes terms dealing with aluminium products, processing, sampling and testing, product characteristics and different types of visual quality characteristics. It does not include terms dealing with bauxite mining, alumina and anode production and aluminium smelting. This European Standard tries to adhere as closely as possible to the terms and definitions used in other standards or documents.

Keel en

Asendab EVS-EN 12258-1:1999

#### **EVS-EN 62474:2012**

Hind 18

Identne EN 62474:2012

ja identne IEC 62474:2012

#### **Material declaration for products of and for the electrotechnical industry**

This International Standard specifies the procedure, content, and form relating to material declarations for products of companies operating in and supplying the electrotechnical industry. Process chemicals and emissions during product use are not in the scope of this International Standard. The main intended use of this International Standard is to provide data to downstream manufacturers that: - allows them to assess products against substance restriction compliance requirements - they can use in their environmentally conscious design process and across all product life cycle phases Clause 4 specifies requirements for a material declaration. Clause 5 specifies the criteria for declarable substances and material classes in the IEC 62474 database associated with this standard. Clause 6 specifies the data format and exchange requirements to be included in the IEC 62474 database. Clause 7 specifies the process to regularly update and maintain the IEC 62474 database. Although this International Standard specifies base requirements, it offers flexibility to product manufacturers and suppliers in the selection of additional requirements or information. This International Standard does not provide any specific method to capture material composition data. Organizations have the flexibility to determine the most appropriate method to capture material composition data without compromising data utility and quality. This International Standard is intended to allow reporting based on engineering judgment, supplier material declarations, or on sampling and testing.

Keel en

### **ASENDATUD VÕI TÜHISTATUD STANDARDID**

#### **EVS-EN 165:2005**

Identne EN 165:2005

#### **Silmakaitsevahendid. Sõnastik**

Käesolev Euroopa standard määratleb ja selgitab olulisemaid silmade kaitsmise alal vajaminevaid isiklike kaitsevahenditega seotud termineid, mida kasutatakse järgmistes EN standardites: EN 166, 167, 168, 169, 170, 171, 172, 173, 174, 207, 208 ja 379. Tabel lisas A esitab päikese kiirgusenergia spektraaljaotuse spektri infrapunases osas.

Keel en

Asendab EVS-EN 165:1999

Asendatud EVS-EN ISO 4007:2012

## **EVS-EN 934-2:2009**

Identne EN 934-2:2009

### **Betooni, mördi ja süstmördi keemilised lisandid. Osa 2: Betooni keemilised lisandid. Määratlused, nõuded, vastavus, tähistus ja sildistus**

Käesolev Euroopa standard spetsifitseerib betoonis kasutatavate keemiliste lisandite määratlused ja neile esitatavad nõuded. Standard hõlmab sarrustamata betooni, raudbetooni ja pingebetooni lisandeid, mida kasutatakse platsibetooni, kaubabetooni ja valmiselementide valmistamisel. Käesolevas standardis esitatavad toimivusnõuded kehtivad tavalise konsistentsiga betoonis kasutatavatele lisanditele. Need nõuded võivad teist tüüpi betoonides, nagu poolkuivad ja muldniisked segud, kasutatavatele lisanditele mitte rakenduda. Käesolev standard ei käsitle lisandite kasutamist betooni tootmisel, nt nõudeid lisandite sisaldava betooni koostisele, segamisele, paigaldamisele, hooldamisele jne.

Keel et

Asendab EVS-EN 934-2:2002+A1:2004+A2:2006

Asendatud EVS-EN 934-2:2009+A1:2012

## **EVS-EN 12258-1:1999**

Identne EN 12258-1:1998

### **Alumiinium ja alumiiniumisulamid. Tingimused ja määratlused. Osa 1: Üldterminid**

See Euroopa standard määrab kindlaks üldterminid, mis hõlbustavad alumiiniumitööstuse ja selle klientide suhtlust alumiiniumtoodete või alumiiniumisulamist toodetega seotud küsimustes.

Keel en

Asendatud EVS-EN 12258-1:2012

## **KAVANDITE ARVAMUSKÜSITLUS**

### **FprEN 12786**

Identne FprEN 12786:2012

Tähtaeg 29.08.2012

### **Safety of machinery - Rules for the drafting of the vibration clauses of safety standards**

This European Standard gives guidance for the writers of harmonized type-C machinery safety standards on how to deal with vibration where hand-transmitted vibration and/or whole-body vibration is identified as a significant hazard. This European Standard also gives guidance on how to deal with the requirement for declaration of the vibration emission of portable hand-held and/or hand-guided machinery and for mobile machinery. This European Standard supplements EN ISO 12100.

Keel en

Asendab EVS-EN 12786:2000

### **FprEN 13984**

Identne FprEN 13984:2012

Tähtaeg 29.08.2012

### **Elastsed niiskisolatsioonimaterjalid. Plastikust ja kummist aurutõkkematerjalid. Definitsioonid ja omadused**

This European Standard specifies the characteristics of flexible sheets of plastic or rubber intended for use as water vapour control layers for buildings and applies to both reinforced and unreinforced products. It specifies requirements and test methods and provides for the evaluation of conformity of the products with the requirements of this European Standard.

Keel en

Asendab EVS-EN 13984:2005; EVS-EN 13984:2005/A1:2007

## **03 TEENUSED. ETTEVÖTTE ORGANISEERIMINE, JUHTIMINE JA KVALITEET. HALDUS. TRANSPORT. SOTSIOLOOGIA**

### **UUED STANDARDID JA PUBLIKATSIOONID**

#### **CEN/TS 16316:2012**

Hind 13,92

Identne CEN/TS 16316:2012

#### **Postal services - Open interface - Sortplan**

This Technical Specification specifies the sort plan file content and structure. It does not deal with other configuration files in sorting machines nor is it applicable to the transport mechanism. The content of a sort plan allows the specification of the following capabilities: - sorting by address and non-address attributes; - sorting of code ranges; - sorting of rejects; - support of display and label texts; - dynamic outlet groups; - sorting to more than one outlet; - overflow handling; - support of cut off time before dispatch; - sequence sorting; - provide volume information (option); - support of Cards; - possibility to add simple manufacturer specific information; - support of various sort code formats and non-address attributes; - support of various display and label formats; - check against characteristics of the sorting machine.

Keel en

## **11 TERVISEHOOLDUS**

### **UUED STANDARDID JA PUBLIKATSIOONID**

#### **EVS-EN 1865-3:2012**

Hind 8,72

Identne EN 1865-3:2012

#### **Kiirabiautodes kasutatavad patsiendi transpordi abivahendid. Osa 3: Tugevdatud kanderaam**

This European Standard specifies minimum requirements for the design and performance of heavy duty stretchers used in road ambulances for the treatment and transportation of patients. It aims to ensure patient safety and minimize the physical effort required by staff operating the equipment.

Keel en

Asendab EVS-EN 1865:2000

#### **EVS-EN 1865-5:2012**

Hind 8,72

Identne EN 1865-5:2012

#### **Kiirabiautodes kasutatavad patsiendi transpordi abivahendid. Osa 5: Kandraami tugi**

This European Standard specifies the minimum requirements for the design and performance of stretcher supports that are installed in road ambulances to hold the main stretcher or incubator systems in accordance with EN 1865-1, EN 1865-2 and EN 13976-2 to ensure patient and operators safety and to minimise the physical effort required by staff operating the equipment. In this European Standard reference is made to EN 1789.

Keel en

Asendab EVS-EN 1865:2000

## ASENDATUD VÕI TÜHISTATUD STANDARDID

### **EVS-EN 1865:2000**

Identne EN 1865:1999

#### **Kiirabiautodes kasutatavate kandraamide ja teiste patsiendi transpordi abivahendite spetsifikatsioonid**

Käesolev standard sätestab kiirabiautodes kasutatavatele kandraamidele ja teistele patsiendi transpordi abivahenditele esitatavaid miinimumnõuded niisugusel viisil, et lisakahjustuste tekke võimalus oleks minimaalne.

Keel et

Asendatud EVS-EN 1865-1:2010; EVS-EN 1865-2:2010; EVS-EN 1865-5:2012; EVS-EN 1865-4:2012; EVS-EN 1865-3:2012

## KAVANDITE ARVAMUSKÜSITLUS

### **prEN 13697**

Identne prEN 13697:2012

Tähtaeg 29.08.2012

#### **Chemical disinfectants and antiseptics - Quantitative non-porous surface test for the evaluation of bactericidal and/or fungicidal activity of chemical disinfectants used in food, industrial, domestic and institutional areas - Test method and requirements without mechanical action (phase 2, step 2)**

This European Standard specifies a test method (phase 2/step 2) and the minimum requirements for bactericidal and/or fungicidal or yeasticidal activity of chemical disinfectants that form a homogeneous physically stable preparation in hard water or – in the case of ready-to-use products– with water in food, industrial, domestic and institutional areas, excluding areas and situations where disinfection is medically indicated and excluding products used on living tissues.

Keel en

Asendab EVS-EN 13697:2002

### **prEN 14180**

Identne prEN 14180 rev:2012

Tähtaeg 29.08.2012

#### **Meditiinilised steriliseerijad. Madaltemperatuuriga auru ja formaldehüüdi kasutavad steriliseerijad. Nõuded ja katsetamine**

This European Standard specifies requirements and tests for LTSF sterilizers, which use a mixture of low temperature steam and formaldehyde as sterilizing agent, and which are working below ambient pressure only. These sterilizers are primarily used for the sterilization of heat labile medical devices in health care facilities. This European Standard specifies minimum requirements: - for the performance and design of sterilizers to ensure that the process is capable of sterilizing medical devices; - for the equipment and controls of these sterilizers necessary for the validation and routine control of the sterilization processes.

Keel en

Asendab EVS-EN 14180:2003+A2:2009

### **prEN ISO 11979-7**

Identne prEN ISO 11979-7:2012

ja identne ISO/DIS 11979-7:2012

Tähtaeg 29.08.2012

#### **Ophthalmic implants - Intraocular lenses - Part 7: Clinical investigations (ISO/DIS 11979-7:2012)**

This part of ISO 11979 specifies particular requirements for clinical investigations for posterior and anterior chamber intraocular lenses (IOLs).

Keel en

Asendab EVS-EN ISO 11979-7:2006; EVS-EN ISO 11979-7:2006/A1:2012

### **prEN ISO 17304**

Identne prEN ISO 17304:2012

ja identne ISO/DIS 17304:2012

Tähtaeg 29.08.2012

#### **Dentistry - Polymerisation shrinkage: Method for determination of polymerisation shrinkage of polymer-based restorative materials (ISO/DIS 17304:2012)**

This International Standard specifies a test method for the measurement of the polymerisation shrinkage of external energy activated polymer-based restorative materials such as composites and core build-up materials. The method is not suitable for Class 1 (self-curing, see ISO 4049) polymer-based restorative materials.

Keel en

## **13 KESKKONNA- JA TERVISEKAITSE. OHUTUS**

### UUED STANDARDID JA PUBLIKATSIOONID

#### **EVS-EN 50291-1:2010/A1:2012**

Hind 5,62

Identne EN 50291-1:2010/A1:2012

#### **Electrical apparatus for the detection of carbon monoxide in domestic premises - Part 1: Test methods and performance requirements**

This European Standard specifies general requirements for the construction, testing and performance of electrically operated carbon monoxide gas detection apparatus, designed for continuous operation in domestic premises. The apparatus may be mains or battery powered. Such apparatus is intended to warn of an accumulation of CO, enabling the occupant to react before being exposed to significant risk.

Keel en

**EVS-EN 50574:2012**

Hind 15,4

Identne EN 50574:2012

**Collection, logistics & treatment requirements for end-of-life household appliances containing volatile fluorocarbons or volatile hydrocarbons**

This European Standard defines requirements for the end of life handling, transportation, storage, sorting and treatment of WEEE household appliances containing volatile fluorocarbons, volatile hydrocarbons, or both. Furthermore, this European Standard only applies to WEEE household appliances that use heat-transfer media other than water e.g. refrigerators, freezers, heat pump tumble dryers, de-humidifiers and portable air conditioners. Discarded appliances covered by this European Standard will have been deposited at a collection facility as domestic WEEE. The European Standard describes requirements for the removal of volatile fluorocarbons and volatile hydrocarbons. These substances can be found as refrigerant in the refrigerating system (partly dissolved in the oil) and as blowing agent in the insulating foam of discarded household appliances.

Keel en

**EVS-EN 60335-2-2:2003/A11:2011/AC:2012**

Hind 0

Identne EN 60335-2-2:2003/A11:2010/AC:2012

**Majapidamis- ja muud taolised elektriseadmed. Ohutus. Osa 2-2: Erinõuded tolmuimejatele ja veeimemis-puhastusseadmetele**

Keel en

**EVS-EN 60335-2-6:2003/A11:2011/AC:2012**

Hind 0

Identne EN 60335-2-6:2003/A11:2010/AC:2012

**Majapidamis- ja muud taolised elektriseadmed. Ohutus. Osa 2-6: Erinõuded statsionaarsetele pliitidele, pliidiplaatidele, ahjudele ja muudele taoliste seadmetele**

Keel en

**EVS-EN 60335-2-7:2003/A11:2011/AC:2012**

Hind 0

Identne EN 60335-2-7:2003/A11:2010/AC:2012

**Majapidamis- ja muud taolised elektriseadmed. Ohutus. Osa 2-7: Erinõuded pesumasinatele**

Keel en

**EVS-EN 60335-2-9:2003/A13:2010/AC:2012**

Hind 0

Identne EN 60335-2-9:2003/A13:2010/AC:2012

**Majapidamis- ja muud taolised elektriseadmed. Ohutus. Osa 2-9: Erinõuded rösteritele, grillidele ja muudele taoliste seadmetele**

Keel en

**EVS-EN 60335-2-23:2003/A11:2011/AC:2012**

Hind 0

Identne EN 60335-2-23:2003/A11:2010/AC:2012

**Majapidamis- ja muud taolised elektriseadmed. Ohutus. Osa 2-23: Erinõuded naha- ja juuksehooldusseadmetele**

Keel en

**EVS-EN 60335-2-25:2003/A11:2010/AC:2012**

Hind 0

Identne EN 60335-2-25:2002/A11:2010/AC:2012

**Majapidamis- ja muud taolised elektriseadmed. Ohutus. Osa 2-25: Erinõuded mikrolaineahjudele**

Keel en

**EVS-EN 62474:2012**

Hind 18

Identne EN 62474:2012

ja identne IEC 62474:2012

**Material declaration for products of and for the electrotechnical industry**

This International Standard specifies the procedure, content, and form relating to material declarations for products of companies operating in and supplying the electrotechnical industry. Process chemicals and emissions during product use are not in the scope of this International Standard. The main intended use of this International Standard is to provide data to downstream manufacturers that: - allows them to assess products against substance restriction compliance requirements - they can use in their environmentally conscious design process and across all product life cycle phases Clause 4 specifies requirements for a material declaration. Clause 5 specifies the criteria for declarable substances and material classes in the IEC 62474 database associated with this standard. Clause 6 specifies the data format and exchange requirements to be included in the IEC 62474 database. Clause 7 specifies the process to regularly update and maintain the IEC 62474 database. Although this International Standard specifies base requirements, it offers flexibility to product manufacturers and suppliers in the selection of additional requirements or information. This International Standard does not provide any specific method to capture material composition data. Organizations have the flexibility to determine the most appropriate method to capture material composition data without compromising data utility and quality. This International Standard is intended to allow reporting based on engineering judgment, supplier material declarations, or on sampling and testing.

Keel en

**EVS-EN ISO 12782-1:2012**

Hind 8,72

Identne EN ISO 12782-1:2012

ja identne ISO 12782-1:2012

**Soil quality - Parameters for geochemical modelling of leaching and speciation of constituents in soils and materials - Part 1: Extraction of amorphous iron oxides and hydroxides with ascorbic acid (ISO 12782-1:2012)**

This part of ISO 12782 specifies the determination of the content of "reactive" iron in the form of amorphous iron oxides and hydroxides in soil and other materials by extraction with ascorbic acid. Other materials also include waste. The content of "reactive" iron can be used as input in geochemical models to represent the content of amorphous iron (hydr)oxides. NOTE Although the ammonium oxalate/oxalic acid extraction (ISO 12782-3) is commonly used to estimate "reactive" iron in the form of iron oxides and hydroxides, this part of ISO 12782, in conjunction with ISO 12782-2, has been shown to be more specific for the extraction of amorphous and crystalline iron (hydr)oxides, respectively.

Keel en

**EVS-EN ISO 12782-2:2012**

Hind 9,49

Identne EN ISO 12782-2:2012

ja identne ISO 12782-2:2012

**Soil quality - Parameters for geochemical modelling of leaching and speciation of constituents in soils and materials - Part 2: Extraction of crystalline iron oxides and hydroxides with dithionite (ISO 12782-2:2012)**

This part of ISO 12782 specifies the determination of the content of "reactive" iron in the form of crystalline iron oxides and hydroxides in soil and other materials by extraction with dithionite. Other materials also include waste. The content of "reactive" iron can be used as input in geochemical models to represent the content of crystalline iron (hydr)oxides. NOTE Although the ammonium oxalate/oxalic acid extraction (ISO 12782-3) is commonly used to estimate "reactive" iron in the form of iron oxides and hydroxides, this part of ISO 12782, in conjunction with ISO 12782-1, has been shown to be more specific for the extraction of crystalline and amorphous iron (hydr)oxides, respectively[7]

Keel en

**EVS-EN ISO 12782-3:2012**

Hind 9,49

Identne EN ISO 12782-3:2012

ja identne ISO 12782-3:2012

**Soil quality - Parameters for geochemical modelling of leaching and speciation of constituents in soils and materials - Part 3: Extraction of aluminium oxalate/oxalic acid (ISO 12782-3:2012)**

This part of ISO 12782 specifies the determination of the content of "reactive" aluminium in the form of amorphous aluminium oxides and hydroxides in soil and other materials by extraction with ammonium oxalate/oxalic acid. Other materials also include waste. The content of "reactive" aluminium can be used as input in geochemical models.

Keel en

**EVS-EN ISO 12782-4:2012**

Hind 13,22

Identne EN ISO 12782-4:2012

ja identne ISO 12782-4:2012

**Soil quality - Parameters for geochemical modelling of leaching and speciation of constituents in soils and materials - Part 4: Extraction of humic substances from solid samples (ISO 12782-4:2012)**

This part of ISO 12782 specifies a procedure to determine the concentration of humic substances in soil or other materials. Other materials also include waste. The content of humic substances can be used as input in geochemical models.

Keel en

**EVS-EN ISO 12782-5:2012**

Hind 12,51

Identne EN ISO 12782-5:2012

ja identne ISO 12782-5:2012

**Soil quality - Parameters for geochemical modelling of leaching and speciation of constituents in soils and materials - Part 5: Extraction of humic substances from aqueous samples (ISO 12782-5:2012)**

This part of ISO 12782 specifies a procedure to determine the concentration of humic substances in aqueous samples. These samples may be obtained as such or as eluates from leaching procedures applied to soil or other materials. Other materials also include waste. The content of humic substances can be used as input in geochemical models.

Keel en

**ASENDATUD VÕI TÜHISTATUD STANDARDID****EVS-EN 165:2005**

Identne EN 165:2005

**Silmakaitsevahendid. Sõnastik**

Käesolev Euroopa standard määratleb ja selgitab olulisemaid silmade kaitsmise alal vajaminevaid isiklike kaitsevahenditega seotud termineid, mida kasutatakse järgmistes EN standardites: EN 166, 167, 168, 169, 170, 171, 172, 173, 174, 207, 208 ja 379. Tabel lisas A esitab päikese kiirgusenergia spektraaljaotuse spektri infrapunases osas.

Keel en

Asendab EVS-EN 165:1999

Asendatud EVS-EN ISO 4007:2012

**EVS-EN 1483:2007**

Identne EN 1483:2007

**Water quality - Determination of mercury - Method using atomic absorption spectrometry**

This European Standard specifies two methods for the determination of mercury. For the method described in Clause 4, tin(II) chloride is used as the reducing agent. For the method given in Clause 5, sodium borohydride serves as the reducing agent. The choice of method depends on the equipment available and the matrix (see Clause 3). Both methods are suitable for the determination of mercury in water, for example in drinking, ground, surface and waste waters, in a concentration range from 0,1 µg/l to 10 µg/l. Higher concentrations can be determined if the water sample is diluted. Lower concentrations in the range of 0,001 µg/l to 5 µg/l can be determined if special mercury analysers with an optimised instrument are used or if atomic fluorescence spectrometry is applied (see EN 13506 or ISO 17852).

Keel en

Asendab EVS-EN 1483:1999

Asendatud EVS-EN ISO 12846:2012

## **EVS-EN 12338:1999**

Identne EN 12338:1998

### **Vee kvaliteet. Elavhõbedasisalduse määramine. Amalgaamimisega rikastusmeetodid**

Käesolev Euroopa standard esitab elavhõbedasisalduse määramise kaks võimalikku varianti, kasutades redutseerijana kas tina(II)kloriidi või naatriumtetrahüdroboraati. Kirjelatud meetodid on sobivad elavhõbeda määramiseks vees, näiteks põhja-, pinna- ja heitvees, kontsentratsioonivahemikus 0,01 - 1 µg/l. Kõrgemaid kontsentratsioone on võimalik määrata lahjendatud veeproovi puhul. Vee üldine elavhõbedasisaldus määratakse pärast proovi digereerimist. Kui on vaja määrata ainult lahustuvaid elavhõbedaühendeid, filtritakse proov enne digereerimist, kasutades 0,45 µm membraanfiltrit. Ühe- või kahevalentne elavhõbe redutseeritakse elementaarkujuni happelises keskkonnas, kasutades selliseid redutseerijaid nagu tina(II)kloriid, SnCl<sub>2</sub>, või naatriumtetrahüdroboraat NaBH<sub>4</sub>. Elementaarne elavhõbe eraldatakse lahusest inertgaasi voo abil ja juhitakse üle suure pindalaga väärismetalli pinna. Selliseks väärismetalli pinnaks on kuld/plaatina võrgu pind, kus elavhõbe absorbeeritakse.

Keel en

Asendatud EVS-EN ISO 12846:2012

## **KAVANDITE ARVAMUSKÜSITLUS**

### **EN 1846-2:2009/FprA1**

Identne EN 1846-2:2009/FprA1:2012

Tähtaeg 29.08.2012

### **Tuletõrje- ja päästeteenistuse sõidukid. Osa 2: Üldnõuded. Ohutus ja jõudlus**

This European Standard specifies the common requirements for safety and the (minimum) common performance requirements of firefighting and rescue service vehicles as designated in EN 1846-1.

Keel en

### **FprEN 12786**

Identne FprEN 12786:2012

Tähtaeg 29.08.2012

### **Safety of machinery - Rules for the drafting of the vibration clauses of safety standards**

This European Standard gives guidance for the writers of harmonized type-C machinery safety standards on how to deal with vibration where hand-transmitted vibration and/or whole-body vibration is identified as a significant hazard. This European Standard also gives guidance on how to deal with the requirement for declaration of the vibration emission of portable hand-held and/or hand-guided machinery and for mobile machinery. This European Standard supplements EN ISO 12100.

Keel en

Asendab EVS-EN 12786:2000

## **FprEN 50131-10**

Identne prEN 50131-10:2012

Tähtaeg 29.08.2012

### **Alarm systems - Intrusion and hold-up systems - Part 10: Application specific requirements for Supervised Premises Transceiver (SPT)**

This European Standard specifies requirements for SPT used in I&HAS to transmit alarm and other messages to a location remote from the supervised premises. NOTE 1 Requirements for the transmission of alarms are given in EN 50136 (all parts). prEN 50136-2 gives requirements for SPT for use in any type of alarm system (e.g. fire, social care, intrusion, etc). This European Standard gives specific requirements for SPT used in Intrusion and Hold-up Alarm Systems (I&HAS) and should be used in combination with prEN 50136-2. The requirements of this European Standard apply to different types of SPT including separate SPT, SPT located within the housings of other I&HAS components and also when the SPT functionality is integrated with the CIE or other parts of an I&HAS. NOTE 2 To facilitate the differing requirements this European Standard includes a categorisation with three types (X, Y and Z). This European Standard does not give requirements for the ATS network or performance..

Keel en

### **FprEN ISO 7827**

Identne FprEN ISO 7827:2012

ja identne ISO 7827:2010

Tähtaeg 29.08.2012

### **Water quality - Evaluation of the "ready", "ultimate" aerobic biodegradability of organic compounds in an aqueous medium - Method by analysis of dissolved organic carbon (DOC) (ISO 7827:2010)**

This International Standard specifies a method for the evaluation of the "ready" and "ultimate" biodegradability of organic compounds at a given range of concentrations by aerobic microorganisms. In this context, this International Standard also gives specific definitions for the terms "ready" and "ultimate". The method applies to organic compounds which are: - soluble at the concentration used under the conditions of the test [dissolved organic carbon (DOC) concentrations of 10 mg/l to 40 mg/l]; - non-volatile or having a negligible vapour pressure under the conditions of the test; - not significantly adsorbable on glass and activated sludge; - not inhibitory to the test microorganisms at the concentration chosen for the test. - The method is not suitable for waste waters, as they usually contain significant amounts of water-insoluble organic carbon, which is not included in DOC measurements.

Keel en

Asendab EVS-EN ISO 7827:1999

**FprEN ISO 15535**

Identne FprEN ISO 15535:2012  
ja identne ISO/FDIS 15535:2012  
Tähtaeg 29.08.2012

**Üldised nõuded antropomeetriaandmebaaside loomiseks (ISO/FDIS 15535:2012)**

This International Standard specifies general requirements for anthropometric databases and their associated reports that contain measurements taken in accordance with ISO 7250-1. It provides necessary information, such as characteristics of the user population, sampling methods, measurement items and statistics, to make international comparison possible among various population segments. The population segments specified in this International Standard are people who are able to hold the postures specified in ISO 7250-1. NOTE The traditional anthropometry defined in ISO 7250-1 is considered to be a necessary complement to 3-D methods which are being developed in some countries. It is important that scanned data are verified according to the definitions given in ISO 7250-1 (see ISO 20685). State-of-the-art software allows integration of traditional anthropometric measures with those obtained by 3-D imaging.

Keel en

Asendab EVS-EN ISO 15535:2007

**prEN 12873-1**

Identne prEN 12873-1:2012  
Tähtaeg 29.08.2012

**Influence of materials on water intended for human consumption - Influence due to migration - Part 1: Test method for factory-made products made from or incorporating organic or glassy (porcelain/vitreous enamel) materials**

This part of EN 12873 specifies a procedure to determine the migration of substances from factory-made or factory-applied products for use in contact with water intended for human consumption. Materials used to make such products include plastics, rubber and glassy (porcelain/vitreous enamel) materials. This part of EN 12873 is applicable to products intended to be used under various conditions for the transport and storage of water intended for human consumption, including raw water used for the production of water intended for human consumption. It covers the extraction by water of substances from the finished products.

Keel en

Asendab EVS-EN 12873-1:2004

**prEN 15208**

Identne prEN 15208 rev:2012  
Tähtaeg 29.08.2012

**Tanks for transport of dangerous goods - Sealed parcel delivery systems - Working principles and interface specifications**

This European Standard is applicable to sealed parcel delivery systems used with transport tanks and specifies the performance requirements, critical safety aspects, data transfer methods between loading gantries and transport tank, transport tank and delivery points, other optional communications and tests to provide functional and compatible systems. Sealed parcel delivery systems covered by this European Standard is for bottom loaded transport tanks. The systems specified by this European Standard are suitable for use with liquid petroleum products and other dangerous substances of Class 3 of ADR which have a vapour pressure not exceeding 110 kPa at 50 °C and petrol, and which have no sub-classification as toxic or corrosive.

Keel en

Asendab EVS-EN 15208:2007

**prEN 15768**

Identne prEN 15768:2012  
Tähtaeg 29.08.2012

**GC-MS identification of water leachable organic substances from materials in contact with water intended for human consumption**

This European Standard describes a method for identifying organic chemicals that are amenable to GC-MS analysis using the procedures described and which may migrate from a product into water intended for human consumption. A method of semi-quantitatively estimating the concentrations of the organic substances identified is also provided. NOTE The method to be used for the preparation of migration waters is specified by separate EN standards, as noted below.

Keel en

**prEN 16424**

Identne prEN 16424:2012  
Tähtaeg 29.08.2012

**Characterization of waste - Screening methods for the element composition by portable X-ray fluorescence instruments**

This Technical Specification is dedicated to field portable X-ray fluorescence (XRF) equipment (hand-held or portable bench top) and describes a screening method for the determination of the elemental composition of waste materials for on-site verification. Portable XRF spectrometers are used for a rapid and exploratory analysis of liquid, paste-like or solid materials. The absence or presence of specific elements is displayed qualitatively in terms of negatives and positives with an indication of the concentration level.

Keel en



## **prEN 16448-1**

Identne prEN 16448-1:2012

Tähtaeg 29.08.2012

### **Protective Clothing - Body Armour - Part 1: General requirements**

This European Standard specifies the minimum general requirements for body armour intended to provide basic torso protection and high protection to some vital organs against assaults by firearms and / or edged and pointed weapons including sizing, coverage, ergonomic and innocuousness requirements, and requirements for labelling and the provision of information. The standard targets products aimed for the civilian market, for example for different types of guards. Smaller components such as collars, shoulders & groin protectors (if included) fall outside the scope of this standard.

Keel en

## **prEN 16448-2**

Identne prEN 16448-2:2012

Tähtaeg 29.08.2012

### **Protective Clothing - Body Armour - Part 2: Bullet resistance, requirements and test methods**

Part 2 of this of European Standard contains the performance requirements and test methods for determining the resistance of body armour to impacts by bullets from handguns (pistols and revolvers), and rifles.

Keel en

## **prEN 16448-3**

Identne prEN 16448-3:2012

Tähtaeg 29.08.2012

### **Protective Clothing - Body Armour - Part 3: Knife and Spike Resistance, Requirements and test methods**

This European Standard specifies the minimum general requirements and test methods for body armour intended to provide torso protection against assaults by edged weapons. The standard targets products aimed for the civilian market, for example for different types of guards.

Keel en

## **17 METROLOOGIA JA MÕÕTMINE. FÜSIKALISED NÄHTUSED**

### **UUED STANDARDID JA PUBLIKATSIOONID**

#### **EVS-EN 60704-2-4:2012**

Hind 10,19

Identne EN 60704-2-4:2012

ja identne IEC 60704-2-4:2011

#### **Kodumajapidamises ja sarnastes oludes kasutatavad elektriseadmed. Katsenormid õhumüra määramiseks. Osa 2-4: Erinõuded pesumasinatele ja tsentrifuugidele**

These particular requirements apply to single unit electrical washing machines and the washing and spinning function of combined appliances for household and similar use and to spin extractors for household and similar use.

Keel en

Asendab EVS-EN 60704-2-4:2002

### **ASENDATUD VÕI TÜHISTATUD STANDARDID**

#### **EVS-EN 60704-2-4:2002**

Identne EN 60704-2-4:2001

ja identne IEC 60704-2-4:2001

#### **Kodumajapidamises ja sarnastes oludes kasutatavad elektriseadmed. Katsenormid õhumüra määramiseks. Osa 2-4: Erinõuded pesumasinatele ja tsentrifuugidele**

This standard applies to single unit electric washing machines for household and similar use, and to spin extractors. Limitations for the use of this test code are given in the scope clause of IEC Publication 704-1.

Keel en

Asendatud EVS-EN 60704-2-4:2012

### **KAVANDITE ARVAMUSKÜSITLUS**

#### **FprEN 12786**

Identne FprEN 12786:2012

Tähtaeg 29.08.2012

#### **Safety of machinery - Rules for the drafting of the vibration clauses of safety standards**

This European Standard gives guidance for the writers of harmonized type-C machinery safety standards on how to deal with vibration where hand-transmitted vibration and/or whole-body vibration is identified as a significant hazard. This European Standard also gives guidance on how to deal with the requirement for declaration of the vibration emission of portable hand-held and/or hand-guided machinery and for mobile machinery. This European Standard supplements EN ISO 12100.

Keel en

Asendab EVS-EN 12786:2000

#### **FprEN 60404-11**

Identne FprEN 60404-11:2012

ja identne IEC 60404-11:1991 + A1:1998 + A2:2012

Tähtaeg 29.08.2012

#### **Magnetic materials - Part 11: Method of test for the determination of surface insulation resistance of magnetic sheet and strip**

This International Standard is intended to define a measurement method for the determination of the characteristics of surface insulation resistance of magnetic sheet and strip. This method is applicable to magnetic sheet and strip insulated on one or both surfaces and is suitable for manufacturing control in the application of insulation coatings.

Keel en

Asendab EVS-EN 10282:2001

## **FprEN 62496-2-4**

Identne FprEN 62496-2-4:2012

ja identne IEC 62496-2-4:201X

Tähtaeg 29.08.2012

### **Optical circuit boards - Part 2-4: Tests - Optical transmission test for optical circuit boards without input/output fibres**

This part of IEC 62496 specifies the test method to decide whether to pass or fail an optical circuit board using direct illumination by a light. The input ports are directly illuminated and the optical intensity from the output ports of the optical circuit board is monitored using an area image sensor. Then excess optical losses are calculated from total detected intensities of light from a sample to be measured and from a control sample. This method is used to illuminate uniformly the input port of the optical circuit board (OCB) with a larger area than the core area, obtain the radiance of area image from corresponding output port of OCB using an area image sensor, and evaluate whether to pass or fail using the radiance obtained compared to that of a control sample. The advantage of this test method is that the alignment procedure between a launch fibre and the OCB is not necessary.

Keel en

## **FprEN 62716**

Identne FprEN 62716:2012

ja identne IEC 62716:201X

Tähtaeg 29.08.2012

### **Ammonia corrosion testing of photovoltaic (PV) modules**

Photovoltaic (PV) modules are electrical devices intended for continuous outdoor exposure during their lifetime. Highly corrosive wet atmospheres, such as in the environment of stables of agricultural companies, could eventually degrade some of the PV module components (corrosion of metallic parts, deterioration of the properties of some non-metallic materials - such as protective coatings and plastics - by assimilation of ammonia) causing permanent damages that could impair their functioning and safe operation. This standard describes test sequences useful to determine the resistance of PV modules to ammonia (NH<sub>3</sub>). All tests included in the sequences, except the bypass diode functionality test, are fully described in IEC 61215, IEC 61646 and IEC 61730-2. They are combined in this standard to provide means to evaluate possible faults caused in PV modules when operating under wet atmospheres having high concentration of dissolved ammonia (NH<sub>3</sub>). This standard shall be applied to flat plate PV modules. The structure of this standard follows closely IEC 61701.

Keel en

## **19 KATSETAMINE**

### **UUED STANDARDID JA PUBLIKATSIOONID**

#### **EVS-EN 61010-2-033:2012**

Hind 13,92

Identne EN 61010-2-033:2012

ja identne IEC 61010-2-033:2012

#### **Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 2-033: Particular requirements for hand-held multimeters and other hand-held meters, for domestic and professional use, capable of measuring mains voltage**

This part of IEC 61010 specifies safety requirements for METERS. The METERS that have a primary purpose of measuring voltage on a live MAINS CIRCUIT are within the scope of this standard. They have various names, but all of them have capability for measurements of voltages on a live MAINS CIRCUIT. Some of the names given to this equipment are as follows: - MULTIMETER; - digital MULTIMETER; - VOLTMETER; - clamp METER (see also Part 2-032). For the purpose of this standard, the term METER is used for these HAND-HELD measuring instruments.

Keel en

## 21 ÜLDKASUTATAVAD MASINAD JA NENDE OSAD

### UUED STANDARDID JA PUBLIKATSIOONID

#### **EVS-EN ISO 898-5:2012**

Hind 10,19

Identne EN ISO 898-5:2012

ja identne ISO 898-5:2012

#### **Mechanical properties of fasteners made of carbon steel and alloy steel - Part 5: Set screws and similar threaded fasteners with specified hardness classes - Coarse thread and fine pitch thread (ISO 898-5:2012)**

This part of ISO 898 specifies mechanical and physical properties of set screws and similar threaded fasteners made of carbon steel or alloy steel when tested at an ambient temperature range of 10 °C to 35 °C. Fasteners (the term used when set screws and similar threaded fasteners are considered all together) which conform to the requirements of this part of ISO 898 are evaluated at that ambient temperature range. Fasteners in conformance with this part of ISO 898 are classified to specified hardness classes and are intended for use under compressive stress only. NOTE Fasteners conforming to the requirements of this part of ISO 898 are used in applications ranging from -50 °C to +150 °C. It is the responsibility of users to consult an experienced fastener metallurgist for temperatures outside the range of -50 °C to +150 °C and up to a maximum temperature of +300 °C when determining appropriate choices for a given application. This part of ISO 898 is applicable to set screws and similar threaded fasteners: - made of carbon steel or alloy steel, - having a triangular ISO metric screw thread in conformance with ISO 68-1, - with a coarse pitch thread of M1,6 to M30, and a fine pitch thread of M8x1 to M30x2, - with diameter/pitch combinations in conformance with ISO 261 and ISO 262, and - having thread tolerances in conformance with ISO 965-1 and ISO 965-2. It does not specify requirements for such properties as - tensile strength, - shear strength, - weldability, - corrosion resistance, or - the ability to withstand temperatures above +150 °C or below -50 °C.

Keel en

Asendab EVS-EN ISO 898-5:1999

### ASENDATUD VÕI TÜHISTATUD STANDARDID

#### **EVS-EN ISO 898-5:1999**

Identne EN ISO 898-5:1998

ja identne ISO 898-5:1998

#### **Süsinik- ja legeerterasest valmistatud kinnitusdetailide mehaanilised omadused. Osa 5: Seadekruvid ja sarnased tõmbepinge all mitteolevad keermestatud kinnitusdetailid**

ISO 898 see osa määrab kindlaks süsinik- või legeerterasest valmistatud, 1,6 - 24 mm (kaasa arvatud) keerme nimiläbimõõduga seadekruvide ja sarnaste tõmbepinge all mitteolevate kinnitusdetailide mehaanilised omadused.

Keel en

Asendatud EVS-EN ISO 898-5:2012

## 23 ÜLDKASUTATAVAD HÜDRO- JA PNEUMOSÜSTEEMID JA NENDE OSAD

### UUED STANDARDID JA PUBLIKATSIOONID

#### **EVS-EN 13445-2:2009/A1:2012**

Hind 8,01

Identne EN 13445-2:2009/A1:2012

#### **Leekkuumutuseta surveanumad. Osa 2: Materjalid**

This Part of this European Standard specifies the requirements for materials (including clad materials) for unfired pressure vessels and supports which are covered by EN 13445-1:2009 and manufactured from metallic materials; it is currently limited to steels with sufficient ductility but it is, for components operating in the creep range, also limited to sufficiently creep ductile materials. It specifies the requirements for the selection, inspection, testing and marking of metallic materials for the fabrication of unfired pressure vessels.

Keel en

#### **EVS-EN 13445-2:2009/A2:2012**

Hind 4,79

Identne EN 13445-2:2009/A2:2012

#### **Leekkuumutuseta surveanumad. Osa 2: Materjalid**

This Part of this European Standard specifies the requirements for materials (including clad materials) for unfired pressure vessels and supports which are covered by EN 13445-1:2009 and manufactured from metallic materials; it is currently limited to steels with sufficient ductility but it is, for components operating in the creep range, also limited to sufficiently creep ductile materials. It specifies the requirements for the selection, inspection, testing and marking of metallic materials for the fabrication of unfired pressure vessels.

Keel en

#### **EVS-EN 13445-3:2009/A1:2012**

Hind 8,01

Identne EN 13445-3:2009/A1:2012

#### **Leekkuumutuseta surveanumad. Osa 3: Kavandamine**

This Part of this European Standard specifies requirements for the design of unfired pressure vessels covered by EN 13445-1:2009 and constructed of steels in accordance with EN 13445-2:2009. EN 13445-5:2009, Annex C specifies requirements for the design of access and inspection openings, closing mechanisms and special locking elements.

Keel en

### KAVANDITE ARVAMUSKÜSITLUS

#### **prEN 14570**

Identne prEN 14570 rev:2012

Tähtaeg 29.08.2012

#### **Vedelgaasi (LPG) seadmed ja lisavarustus.**

#### **Maapealsete ja maa-aluste LPG mahutite varustus**

This European Standard specifies requirements for the equipping of LPG pressure vessels, overground and underground, with a volume not greater than 13 m<sup>3</sup> manufactured in accordance with EN 12542 or equivalent and have been hydraulically tested. The equipment covered by this European Standard is directly mounted onto the pressure vessel connections. This European Standard excludes the equipping of depot storage vessels and refrigerated storage pressure vessels.

Keel en

Asendab EVS-EN 14570:2007

## prEN 15207

Identne prEN 15207 rev:2012

Tähtaeg 29.08.2012

### **Tanks for the transport of dangerous goods - Plug/socket connection and supply characteristics for service equipment in hazardous areas with 24 V nominal supply voltage**

This European Standard specifies the interoperability requirements for the tractor/trailer and/or transport tank/trailer plug/socket for the use in hazardous areas, being: - the connection used for the supply Type A and supply Type S electrical power to service equipment; and - the supply characteristics for each operating mode. This plug/socket combination includes provisions for future connections including data transfer. The plug/socket connection is not used for purposes which are specified in other standards for truck – trailer connections e.g. ISO 12098 and ISO 7638-1.

Keel en

Asendab EVS-EN 15207:2007

## prEN 15208

Identne prEN 15208 rev:2012

Tähtaeg 29.08.2012

### **Tanks for transport of dangerous goods - Sealed parcel delivery systems - Working principles and interface specifications**

This European Standard is applicable to sealed parcel delivery systems used with transport tanks and specifies the performance requirements, critical safety aspects, data transfer methods between loading gantries and transport tank, transport tank and delivery points, other optional communications and tests to provide functional and compatible systems. Sealed parcel delivery systems covered by this European Standard is for bottom loaded transport tanks. The systems specified by this European Standard are suitable for use with liquid petroleum products and other dangerous substances of Class 3 of ADR which have a vapour pressure not exceeding 110 kPa at 50 °C and petrol, and which have no sub-classification as toxic or corrosive.

Keel en

Asendab EVS-EN 15208:2007

## 25 TOOTMISTEHNOLLOOGIA

### UUED STANDARDID JA PUBLIKATSIOONID

#### **EVS-EN 61158-4-2:2012**

Hind 33,25

Identne EN 61158-4-2:2012

ja identne IEC 61158-4-2:2010

#### **Industrial communication networks - Fieldbus specifications - Part 4-2: Data-link layer protocol specification - Type 2 elements**

The data-link layer provides basic time-critical messaging communications between devices in an automation environment. This protocol provides communication opportunities to all participating data-link entities, sequentially and in a cyclic synchronous manner. Foreground scheduled access is available for time-critical activities together with background unscheduled access for less critical activities. Deterministic and synchronized transfers can be provided at cyclic intervals up to 1 ms and device separations of 25 km. This performance is adjustable dynamically and on-line by reconfiguring the parameters of the local link whilst normal operation continues. By similar means, DL connections and new devices may be added or removed during normal operation. This protocol provides means to maintain clock synchronization across an extended link with a precision better than 10 µs. This protocol optimizes each access opportunity by concatenating multiple DLSDUs and associated DLPCI into a single DLPDU, thereby improving data transfer efficiency for datalink entities that actively source multiple streams of data. The maximum system size is an unlimited number of links of 99 nodes, each with 255 DLSAAddresses. Each link has a maximum of 224 related peer and publisher DLCEPs.

Keel en

Asendab EVS-EN 61158-4-2:2008

#### **EVS-EN 61158-4-3:2012**

Hind 26,5

Identne EN 61158-4-3:2012

ja identne IEC 61158-4-3:2010

#### **Industrial communication networks - Fieldbus specifications - Part 4-3: Data-link layer protocol specification - Type 3 elements**

The data-link layer provides basic time-critical messaging communications between devices in an automation environment. This protocol provides communication opportunities to a pre-selected "master" subset of datalink entities in a cyclic asynchronous manner, sequentially to each of those data-link entities. Other data-link entities communicate only as permitted and delegated by those master datalink entities. For a given master, its communications with other data-link entities can be cyclic, or acyclic with prioritized access, or a combination of the two. This protocol provides a means of sharing the available communication resources in a fair manner. There are provisions for time synchronization and for isochronous operation.

Keel en

Asendab EVS-EN 61158-4-3:2008

**EVS-EN 61158-5-2:2012**

Hind 27,7

Identne EN 61158-5-2:2012

ja identne IEC 61158-5-2:2010

**Industrial communication networks - Fieldbus specifications - Part 5-2: Application layer service definition - Type 2 elements**

The fieldbus application layer (FAL) provides user programs with a means to access the fieldbus communication environment. In this respect, the FAL can be viewed as a "window between corresponding application programs." This standard provides common elements for basic time-critical and non-time-critical messaging communications between application programs in an automation environment and material specific to Type 2 fieldbus. The term "time-critical" is used to represent the presence of a time-window, within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant and possibly human life. This standard defines in an abstract way the externally visible service provided by the Type 2 fieldbus application layer in terms of a) an abstract model for defining application resources (objects) capable of being manipulated by users via the use of the FAL service, b) the primitive actions and events of the service; c) the parameters associated with each primitive action and event, and the form which they take; and d) the interrelationship between these actions and events, and their valid sequences. The purpose of this standard is to define the services provided to a) the FAL user at the boundary between the user and the application layer of the fieldbus reference model, and b) Systems Management at the boundary between the application layer and Systems Management of the fieldbus reference model.

Keel en

Asendab EVS-EN 61158-5-2:2008

**EVS-EN 61158-5-3:2012**

Hind 39,3

Identne EN 61158-5-3:2012

ja identne IEC 61158-5-3:2010

**Industrial communication networks - Fieldbus specifications - Part 5-3: Application layer service definition - Type 3 elements**

This standard is one of a series produced to facilitate the interconnection of automation system components. It is related to other standards in the set as defined by the "three-layer" fieldbus reference model described in IEC/TR 61158-1. This sub-part contains material specific to Type 3 fieldbus.

Keel en

Asendab EVS-EN 61158-5-3:2008

**EVS-EN 61158-3-12:2012**

Hind 16,1

Identne EN 61158-3-12:2012

ja identne IEC 61158-3-12:2010

**Industrial communication networks - Fieldbus specifications - Part 3-12: Data-link layer service definition - Type 12 elements**

This part of IEC 61158 provides common elements for basic time-critical messaging communications between devices in an automation environment. The term "time-critical" is used to represent the presence of a time-window, within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant and possibly human life. This standard defines in an abstract way the externally visible service provided by the Type 12 fieldbus data-link layer in terms of a) the primitive actions and events of the service; b) the parameters associated with each primitive action and event, and the form which they take; c) the interrelationship between these actions and events, and their valid sequences. The purpose of this standard is to define the services provided to - the Type 12 fieldbus application layer at the boundary between the application and data-link layers of the fieldbus reference model; - systems management at the boundary between the data-link layer and systems management of the fieldbus reference model.

Keel en

Asendab EVS-EN 61158-3-12:2008

**EVS-EN 61158-3-14:2012**

Hind 11,67

Identne EN 61158-3-14:2012

ja identne IEC 61158-3-14:2010

**Industrial communication networks - Fieldbus specifications - Part 3-14: Data-link layer service definition - Type 14 elements**

This part of IEC 61158 provides common elements for basic time-critical messaging communications between devices in an automation environment. The term "time-critical" is used to represent the presence of a time-window, within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant and possibly human life. This standard defines in an abstract way the externally visible service provided by the Type 14 fieldbus data-link layer in terms of a) the primitive actions and events of the service; b) the parameters associated with each primitive action and event, and the form which they take; and c) the interrelationship between these actions and events, and their valid sequences. The purpose of this standard is to define the services provided to - the Type 14 fieldbus application layer at the boundary between the application and datalink layers of the fieldbus reference model, and - systems management at the boundary between the data-link layer and systems management of the fieldbus reference model.

Keel en

Asendab EVS-EN 61158-3-14:2008

**EVS-EN 61158-3-19:2012**

Hind 12,51

Identne EN 61158-3-19:2012

ja identne IEC 61158-3-19:2010

**Industrial communication networks - Fieldbus specifications - Part 3-19: Data-link layer service definition - Type 19 elements**

This standard provides common elements for basic time-critical messaging communications between devices in an automation environment. The term "time-critical" is used to represent the presence of a time-window, within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant and possibly human life. This standard defines in an abstract way the externally visible service provided by the Type 19 fieldbus data-link layer in terms of a) the primitive actions and events of the service; b) the parameters associated with each primitive action and event, and the form which they take; and c) the interrelationship between these actions and events, and their valid sequences. The purpose of this standard is to define the services provided to - the Type 19 fieldbus application layer at the boundary between the application and datalink layers of the fieldbus reference model, and - systems management at the boundary between the data-link layer and systems management of the fieldbus reference model.

Keel en

Asendab EVS-EN 61158-3-19:2008

**EVS-EN 61158-3-21:2012**

Hind 16,1

Identne EN 61158-3-21:2012

ja identne IEC 61158-3-21:2010

**Industrial communication networks - Fieldbus specifications - Part 3-21: Data-link layer service definition - Type 21 elements**

This part of IEC 61158 provides the common elements for basic time-critical messaging communications between devices in an automation environment. The term "time-critical" in this context means the prioritized full-duplex collision-free time-deterministic communication, of which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the required time risks the failure of the applications requesting the actions, with attendant risk to equipment, plant, and possibly human life. This standard defines in an abstract way the externally visible service provided by the Type 21 data-link layer in terms of: a) the primitive actions and events of the service; b) the parameters associated with each primitive action and event, and the form that they take; and c) the interrelationships between these actions and events, and their valid sequences. The purpose of this standard is to define the services provided to: - The Type 21 application layer at the boundary between the application and DLLs of the fieldbus reference model; - Systems management at the boundary between the DLL and the systems management of the fieldbus reference model.

Keel en

**EVS-EN 61158-3-22:2012**

Hind 14,69

Identne EN 61158-3-22:2012

ja identne IEC 61158-3-22:2010

**Industrial communication networks - Fieldbus specifications - Part 3-22: Data-link layer service definition - Type 22 elements**

This part of IEC 61158 provides common elements for basic time-critical messaging communications between devices in an automation environment. The term "time-critical" is used to represent the presence of a time-window, within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant and possibly human life. This standard defines in an abstract way the externally visible service provided by the Type 22 fieldbus data-link layer in terms of: a) the primitive actions and events of the service; b) the parameters associated with each primitive action and event, and the form which they take; and c) the interrelationship between these actions and events, and their valid sequences. The purpose of this standard is to define the services provided to: - the Type 22 fieldbus application layer at the boundary between the application and datalink layers of the fieldbus reference model; and - systems management at the boundary between the data-link layer and systems management of the fieldbus reference model.

Keel en

**EVS-EN 61158-4-11:2012**

Hind 25,03

Identne EN 61158-4-11:2012

ja identne IEC 61158-4-11:2010

**Industrial communication networks - Fieldbus specifications - Part 4-11: Data-link layer protocol specification - Type 11 elements**

The data-link layer provides basic time-critical messaging communications between devices in an automation environment. This protocol provides communication opportunities to all participating data-link entities a) in a synchronously-starting cyclic manner, according to a pre-established schedule, and b) in a cyclic or acyclic asynchronous manner, as requested each cycle by each of those data-link entities. Thus this protocol can be characterized as one which provides cyclic and acyclic access asynchronously but with a synchronous restart of each cycle.

Keel en

Asendab EVS-EN 61158-4-11:2008

**EVS-EN 61158-4-12:2012**

Hind 25,03

Identne EN 61158-4-12:2012

ja identne IEC 61158-4-12:2010

**Industrial communication networks - Fieldbus specifications - Part 4-12: Data-link layer protocol specification - Type 12 elements**

The data-link layer provides basic time-critical messaging communications between devices in an automation environment. This protocol provides communication opportunities to all participating data-link entities a) in a synchronously-starting cyclic manner, and b) in a cyclic or acyclic asynchronous manner, as requested each cycle by each of those data-link entities. Thus this protocol can be characterized as one which provides cyclic and acyclic access asynchronously but with a synchronous restart of each cycle.

Keel en

Asendab EVS-EN 61158-4-12:2008

**EVS-EN 61158-4-14:2012**

Hind 13,92

Identne EN 61158-4-14:2012

ja identne IEC 61158-4-14:2010

**Industrial communication networks - Fieldbus specifications - Part 4-14: Data-link layer protocol specification - Type 14 elements**

The data-link layer provides basic time-critical messaging communications between devices in an automation environment. This protocol provides communication opportunities to all participating data-link entities a) in a synchronously-starting cyclic manner, according to a pre-established schedule, and b) in a cyclic or acyclic asynchronous manner, as requested each cycle by each of those data-link entities. Thus this protocol can be characterized as one which provides cyclic and acyclic access asynchronously but with a synchronous restart of each cycle.

Keel en

Asendab EVS-EN 61158-4-14:2008

**EVS-EN 61158-4-18:2012**

Hind 14,69

Identne EN 61158-4-18:2012

ja identne IEC 61158-4-18:2010

**Industrial communication networks - Fieldbus specifications - Part 4-18: Data-link layer protocol specification - Type 18 elements**

The data-link layer provides basic time-critical messaging communications between devices in an automation environment. This protocol provides communication opportunities to all participating data-link entities a) in a synchronously-starting cyclic manner, according to a pre-established schedule, and b) in a cyclic or acyclic asynchronous manner, as requested each cycle by each of those data-link entities. Thus this protocol can be characterized as one which provides cyclic and acyclic access asynchronously but with a synchronous restart of each cycle.

Keel en

Asendab EVS-EN 61158-4-18:2008

**EVS-EN 61158-4-19:2012**

Hind 25,03

Identne EN 61158-4-19:2012

ja identne IEC 61158-4-19:2010

**Industrial communication networks - Fieldbus specifications - Part 4-19: Data-link layer protocol specification - Type 19 elements**

The data-link layer provides basic time-critical messaging communications between devices in an automation environment. This protocol provides communication opportunities to all participating data-link entities a) in a synchronously-starting cyclic manner, according to a pre-established schedule, and b) in a cyclic or acyclic asynchronous manner, as requested each cycle by each of those data-link entities. Thus this protocol can be characterized as one which provides cyclic and acyclic access asynchronously but with a synchronous restart of each cycle.

Keel en

Asendab EVS-EN 61158-4-19:2008

**EVS-EN 61158-4-21:2012**

Hind 23,62

Identne EN 61158-4-21:2012

ja identne IEC 61158-4-21:2010

**Industrial communication networks - Fieldbus specifications - Part 4-21: Data-link layer protocol specification - Type 21 elements**

The DLL provides basic time-critical data communications between devices in an automated environment. Type 21 provides priority-based cyclic and acyclic data communication using an internal collision-free, full-duplex dual-port Ethernet switch technology. For wide application in various automation applications, Type 21 does not restrict the cyclic/acyclic scheduling policy in the DLL.

Keel en

**EVS-EN 61158-4-22:2012**

Hind 19,05

Identne EN 61158-4-22:2012

ja identne IEC 61158-4-22:2010

**Industrial communication networks - Fieldbus specifications - Part 4-22: Data-link layer protocol specification - Type 22 elements**

The data-link layer provides basic time-critical messaging communications between devices in an automation environment. This protocol provides communication opportunities to all participating data-link entities a) in a synchronously-starting cyclic manner, according to a pre-established schedule, and b) in a cyclic or acyclic asynchronous manner, as requested each cycle by each of those data-link entities. Thus this protocol can be characterized as one which provides cyclic and acyclic access asynchronously but with a synchronous restart of each cycle.

Keel en

**EVS-EN 61158-5-10:2012**

Hind 43,87

Identne EN 61158-5-10:2012

ja identne IEC 61158-5-10:2010

**Industrial communication networks - Fieldbus specifications - Part 5-10: Application layer service definition - Type 10 elements**

The fieldbus Application Layer (FAL) provides user programs with a means to access the fieldbus communication environment. In this respect, the FAL can be viewed as a “window between corresponding application programs”. This standard provides common elements for basic time-critical and non-time-critical messaging communications between application programs in an automation environment and material specific to type 10 fieldbus. The term “time-critical” is used to represent the presence of a time-window, within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant and possibly human life. This standard defines in an abstract way the externally visible service provided by the type 10 fieldbus Application Layer in terms of a) an abstract model for defining application resources (objects) capable of being manipulated by users via the use of the FAL service, b) the primitive actions and events of the service; c) the parameters associated with each primitive action and event, and the form which they take; and d) the interrelationship between these actions and events, and their valid sequences. The purpose of this standard is to define the services provided to a) the FAL user at the boundary between the user and the Application Layer of the Fieldbus Reference Model, and b) Systems Management at the boundary between the Application Layer and Systems Management of the Fieldbus Reference Model.

Keel en

Asendab EVS-EN 61158-5-10:2008

**EVS-EN 61158-5-12:2012**

Hind 23,62

Identne EN 61158-5-12:2012

ja identne IEC 61158-5-12:2010

**Industrial communication networks - Fieldbus specifications - Part 5-12: Application layer service definition - Type 12 elements**

The fieldbus Application Layer (FAL) provides user programs with a means to access the fieldbus communication environment. In this respect, the FAL can be viewed as a “window between corresponding application programs.” This standard provides common elements for basic time-critical and non-time-critical messaging communications between application programs in an automation environment and material specific to Type 12 fieldbus. The term “time-critical” is used to represent the presence of a time-window, within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant and possibly human life. This standard defines in an abstract way the externally visible service provided by the different Types of the fieldbus Application Layer in terms of a) an abstract model for defining application resources (objects) capable of being manipulated by users via the use of the FAL service, b) the primitive actions and events of the service; c) the parameters associated with each primitive action and event, and the form which they take; and d) the interrelationship between these actions and events, and their valid sequences. The purpose of this standard is to define the services provided to a) the FAL user at the boundary between the user and the Application Layer of the Fieldbus Reference Model, and b) Systems Management at the boundary between the Application Layer and Systems Management of the Fieldbus Reference Model.

Keel en

Asendab EVS-EN 61158-5-12:2008

**EVS-EN 61158-5-14:2012**

Hind 22,15

Identne EN 61158-5-14:2012

ja identne IEC 61158-5-14:2010

**Industrial communication networks - Fieldbus specifications - Part 5-14: Application layer service definition - Type 14 elements**

The fieldbus application layer (FAL) provides user programs with a means to access the fieldbus communication environment. In this respect, the FAL can be viewed as a “window between corresponding application programs.” This standard provides common elements for basic time-critical and non-time-critical messaging communications between application programs in an automation environment and material specific to Type 14 fieldbus. The term “time-critical” is used to represent the presence of a time-window, within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant and possibly human life.

Keel en

Asendab EVS-EN 61158-5-14:2008



**EVS-EN 61158-5-15:2012**

Hind 25,03

Identne EN 61158-5-15:2012

ja identne IEC 61158-5-15:2010

**Industrial communication networks - Fieldbus specifications - Part 5-15: Application layer service definition - Type 15 elements**

In network communications, as in many fields of engineering, it is a fact that "one size does not fit all." Engineering design is about making the right set of trade-offs, and these trade-offs must balance conflicting requirements such as simplicity, generality, ease of use, richness of features, performance, memory size and usage, scalability, determinism, and robustness. These trade-offs must be made in light of the types of information flow (e.g. periodic, one-to-many, request-reply, events), and the constraints imposed by the application and execution platforms. The Type 15 fieldbus provides two major communication mechanisms that complement each others to satisfy communication requirements in the field of automation: the Client/Server and the Publish/Subscribe paradigms. They can be used concurrently on the same device. Type 15 Client/Server operates in a Client/Server relationship. Its application layer service definitions and protocol specifications are independent of the underlying layers, and have been implemented on a variety of stacks and communication media, including EIA/TIA-232, EIA/TIA-422, EIA/TIA-425, HDLC (ISO 13239), fiber, TCP/IP, Wireless LANs and Radios.

Keel en

Asendab EVS-EN 61158-5-15:2008

**EVS-EN 61158-5-18:2012**

Hind 15,4

Identne EN 61158-5-18:2012

ja identne IEC 61158-5-18:2010

**Industrial communication networks - Fieldbus specifications - Part 5-18: Application layer service definition - Type 18 elements**

The fieldbus application layer (FAL) provides user programs with a means to access the fieldbus communication environment. In this respect, the FAL can be viewed as a "window between corresponding application programs." This part of IEC 61158 provides common elements for basic time-critical and non-time-critical messaging communications between application programs in an automation environment and material specific to Type 18 fieldbus. The term "time-critical" is used to represent the presence of a time-window, within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant and possibly human life. This part of IEC 61158 defines in an abstract way the externally visible service provided by the Type 18 fieldbus application layer in terms of a) an abstract model for defining application resources (objects) capable of being manipulated by users via the use of the FAL service; b) the primitive actions and events of the service; c) the parameters associated with each primitive action and event, and the form which they take; and d) the interrelationship between these actions and events, and their valid sequences. The purpose of this part of IEC 61158 is to define the services provided to a) the FAL user at the boundary between the user and the Application Layer of the Fieldbus Reference Model, and b) Systems Management at the boundary between the Application Layer and Systems Management of the Fieldbus Reference Model.

Keel en

Asendab EVS-EN 61158-5-18:2008

**EVS-EN 61158-5-19:2012**

Hind 14,69

Identne EN 61158-5-19:2012

ja identne IEC 61158-5-19:2010

**Industrial communication networks - Fieldbus specifications - Part 5-19: Application layer service definition - Type 19 elements**

The fieldbus application layer (FAL) provides user programs with a means to access the fieldbus communication environment. In this respect, the FAL can be viewed as a "window between corresponding application programs." This standard provides common elements for basic time-critical and non-time-critical messaging communications between application programs in an automation environment and material specific to Type 19 fieldbus. The term "time-critical" is used to represent the presence of a time-window, within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant and possibly human life. This standard defines in an abstract way the externally visible service provided by the fieldbus application layer in terms of a) an abstract model for defining application resources (objects) capable of being manipulated by users via the use of the FAL service, b) the primitive actions and events of the service; c) the parameters associated with each primitive action and event, and the form which they take; and d) the interrelationship between these actions and events, and their valid sequences. The purpose of this standard is to define the services provided to a) the FAL user at the boundary between the user and the application layer of the fieldbus reference model, and b) Systems Management at the boundary between the application layer and Systems Management of the fieldbus reference model.

Keel en

Asendab EVS-EN 61158-5-19:2008

**EVS-EN 61158-5-20:2012**

Hind 17,08

Identne EN 61158-5-20:2012

ja identne IEC 61158-5-20:2010

**Industrial communication networks - Fieldbus specifications - Part 5-20: Application layer service definition - Type 20 elements**

The fieldbus Application Layer (FAL) provides user programs with a means to access the fieldbus communication environment. In this respect, the FAL can be viewed as a "window between corresponding application programs." This part of IEC 61158 provides common elements for basic time-critical and non-time-critical messaging communications between application programs in an automation environment and material specific to Type 20 fieldbus. The term "time-critical" is used to represent the presence of a time-window, within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant and possibly human life. This standard defines in an abstract way the externally visible service provided by the different Types of the fieldbus Application Layer in terms of a) an abstract model for defining application resources (objects) capable of being manipulated by users via the use of the FAL service, b) the primitive actions and events of the service; c) the parameters associated with each primitive action and event, and the form which they take; and d) the interrelationship between these actions and events, and their valid sequences. The purpose of this standard is to define the services provided to a) the FAL user at the boundary between the user and the Application Layer of the Fieldbus Reference Model, and b) Systems Management at the boundary between the Application Layer and Systems Management of the Fieldbus Reference Model.

Keel en

Asendab EVS-EN 61158-5-20:2008

**EVS-EN 61158-5-21:2012**

Hind 20,74

Identne EN 61158-5-21:2012

ja identne IEC 61158-5-21:2010

**Industrial communication networks - Fieldbus specifications - Part 5-21: Application layer service definition - Type 21 elements**

The Fieldbus Application Layer (FAL) provides user programs with a means to access the fieldbus communication environment. In this respect, the FAL can be considered a window between corresponding application programs. This standard provides the common elements for basic time-critical and non-time-critical messaging communications between application programs in an automation environment as well as material specific to the Type 21 protocol. The term "time-critical" is used to represent the presence of a time-window within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant, and possibly human life. This standard defines, in an abstract way, the externally visible service provided by the FAL in terms of: a) an abstract model for defining application resources (objects) capable of being manipulated by users via the FAL service; b) the primitive actions and events of the service; c) the parameters associated with each primitive action and event, and the form that they take; d) the interrelationship between these actions and events, and their valid sequences. The purpose of this standard is to define the services provided to: a) the FAL-user at the boundary between the user and the application layer of the fieldbus Reference Model; b) systems management at the boundary between the application layer and systems management of the fieldbus Reference Model. This standard describes the structure and services of the IEC FAL, in conformance with the OSI Basic Reference Model (ISO/IEC 7498) and the OSI Application layer Structure (ISO/IEC 9545).

Keel en

**EVS-EN 61158-5-22:2012**

Hind 20,74

Identne EN 61158-5-22:2012

ja identne IEC 61158-5-22:2010

**Industrial communication networks - Fieldbus specifications - Part 5-22: Application layer service definition - Type 22 elements**

The fieldbus application layer (FAL) provides user programs with a means to access the fieldbus communication environment. In this respect, the FAL can be viewed as a "window between corresponding application programs." This standard provides common elements for basic time-critical and non-time-critical messaging communications between application programs in an automation environment and material specific to Type 22 fieldbus. The term "time-critical" is used to represent the presence of a time-window, within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant and possibly human life.

Keel en

**EVS-EN 61987-10:2009/AC:2012**

Hind 0

ja identne IEC 61987-10/Cor 1:2012

**Corrigendum 1 - Industrial-process measurement and control - Data structures and elements in process equipment catalogues - Part 10: Lists of properties (LOPs) for industrial-process measurement and control for electronic data exchange - Fundamentals**

Keel en

**ASENDATUD VÕI TÜHISTATUD STANDARDID****EVS-EN 61158-4-2:2008**

Identne EN 61158-4-2:2008

ja identne IEC 61158-4-2:2007

**Industrial communication networks - Fieldbus specifications - Part 5-2: Application layer service definition - Type 2 elements**

It provides user programs with a means to access the fieldbus communication environment. In this respect, the FAL can be viewed as a "window between corresponding application programs." This standard provides common elements for basic time-critical and non-time-critical messaging communications between application programs in an automation environment and material specific to Type 2 fieldbus. The term "time-critical" is used to represent the presence of a time-window, within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant and possibly human life. It includes the following significant changes with respect to the previous edition deletion of the former Type 6 fieldbus, and the placeholder for a Type 5 fieldbus data-link layer, for lack of market relevance; addition of new types of fieldbuses; division of this part into multiple parts numbered.

Keel en

Asendab EVS-EN 61158-4:2004

Asendatud EVS-EN 61158-4-2:2012

**EVS-EN 61158-4-3:2008**

Identne EN 61158-4-3:2008

ja identne IEC 61158-4-3:2007

**Industrial communication networks - Fieldbus specifications - Part 5-3: Application layer service definition - Type 3 elements**

It is one of a series produced to facilitate the interconnection of automation system components. It is related to other standards in the set as defined by the "three-layer" fieldbus reference model described in IEC/TR 61158 1. This sub-part contains material specific to Type 3 fieldbus. It includes the following significant changes with respect to the previous edition deletion of the former Type 6 fieldbus, and the placeholder for a Type 5 fieldbus data-link layer, for lack of market relevance; addition of new types of fieldbuses; division of this part into multiple parts numbered.

Keel en

Asendab EVS-EN 61158-4:2004

Asendatud EVS-EN 61158-4-3:2012

**EVS-EN 61158-5-2:2008**

Identne EN 61158-5-2:2008

ja identne IEC 61158-5-2:2007

**Industrial communication networks - Fieldbus specifications - Part 5-2: Application layer service definition - Type 2 elements**

It provides user programs with a means to access the fieldbus communication environment. In this respect, the FAL can be viewed as a "window between corresponding application programs." This standard provides common elements for basic time-critical and non-time-critical messaging communications between application programs in an automation environment and material specific to Type 2 fieldbus. The term "time-critical" is used to represent the presence of a time-window, within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant and possibly human life. It includes the following significant changes with respect to the previous edition deletion of the former Type 6 fieldbus, and the placeholder for a Type 5 fieldbus data-link layer, for lack of market relevance; addition of new types of fieldbuses; division of this part into multiple parts numbered.

Keel en

Asendab EVS-EN 61158-5:2004

Asendatud EVS-EN 61158-5-2:2012

**EVS-EN 61158-5-3:2008**

Identne EN 61158-5-3:2008

ja identne IEC 61158-5-3:2007

**Industrial communication networks - Fieldbus specifications - Part 5-3: Application layer service definition - Type 3 elements**

It is one of a series produced to facilitate the interconnection of automation system components. It is related to other standards in the set as defined by the "three-layer" fieldbus reference model described in IEC/TR 61158 1. This sub-part contains material specific to Type 3 fieldbus. It includes the following significant changes with respect to the previous edition deletion of the former Type 6 fieldbus, and the placeholder for a Type 5 fieldbus data-link layer, for lack of market relevance; addition of new types of fieldbuses; division of this part into multiple parts numbered.

Keel en

Asendab EVS-EN 61158-5:2004

Asendatud EVS-EN 61158-5-3:2012

**EVS-EN 61158-3-12:2008**

Identne EN 61158-3-12:2008

ja identne IEC 61158-3-12:2007

**Industrial communication networks - Fieldbus specifications - Part 3-12: Data-link layer service definition - Type 12 element**

It provides common elements for basic time-critical messaging communications between devices in an automation environment. The term "time-critical" is used to represent the presence of a time-window, within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant and possibly human life. It includes the following significant changes with respect to the previous edition deletion of the former Type 6 fieldbus, and the placeholder for a Type 5 fieldbus data-link layer, for lack of market relevance; addition of new types of fieldbuses; division of this part into multiple parts numbered.

Keel en

Asendab EVS-EN 61158-3:2004

Asendatud EVS-EN 61158-3-12:2012

**EVS-EN 61158-3-14:2008**

Identne EN 61158-3-14:2008

ja identne IEC 61158-3-14:2007

**Industrial communication networks - Fieldbus specifications - Part 3-14: Data-link layer service definition - Type 14 elements**

It provides common elements for basic time-critical messaging communications between devices in an automation environment. The term "time-critical" is used to represent the presence of a time-window, within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant and possibly human life. It includes the following significant changes with respect to the previous edition deletion of the former Type 6 fieldbus, and the placeholder for a Type 5 fieldbus data-link layer, for lack of market relevance; addition of new types of fieldbuses; division of this part into multiple parts numbered.

Keel en

Asendab EVS-EN 61158-3:2004

Asendatud EVS-EN 61158-3-14:2012

**EVS-EN 61158-3-19:2008**

Identne EN 61158-3-19:2008  
 ja identne IEC 61158-3-19:2007

**Industrial communication networks - Fieldbus specifications - Part 3-19: Data-link layer service definition - Type 19 elements**

It provides common elements for basic time-critical messaging communications between devices in an automation environment. The term "time-critical" is used to represent the presence of a time-window, within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant and possibly human life. It includes the following significant changes with respect to the previous edition deletion of the former Type 6 fieldbus, and the placeholder for a Type 5 fieldbus data-link layer, for lack of market relevance; addition of new types of fieldbuses; division of this part into multiple parts numbered.

Keel en

Asendab EVS-EN 61158-3:2004  
 Asendatud EVS-EN 61158-3-19:2012

**EVS-EN 61158-4-11:2008**

Identne EN 61158-4-11:2008  
 ja identne IEC 61158-4-11:2007

**Industrial communication networks - Fieldbus specifications - Part 4-11: Data-link layer protocol specification - Type 11 elements**

It provides basic time-critical messaging communications between devices in an automation environment. This protocol provides communication opportunities to all participating data-link entities in a synchronously-starting cyclic manner, according to a pre-established schedule, and in a cyclic or acyclic asynchronous manner, as requested each cycle by each of those data-link entities. Thus this protocol can be characterized as one which provides cyclic and acyclic access asynchronously but with a synchronous restart of each cycle. It includes the following significant changes with respect to the previous edition deletion of the former Type 6 fieldbus, and the placeholder for a Type 5 fieldbus data-link layer, for lack of market relevance; addition of new types of fieldbuses; division of this part into multiple parts numbered.

Keel en

Asendab EVS-EN 61158-4:2004  
 Asendatud EVS-EN 61158-4-11:2012

**EVS-EN 61158-4-12:2008**

Identne EN 61158-4-12:2008  
 ja identne IEC 61158-4-12:2007

**Industrial communication networks - Fieldbus specifications - Part 4-12: Data-link layer protocol specification - Type 12 elements**

It provides basic time-critical messaging communications between devices in an automation environment. This protocol provides communication opportunities to all participating data-link entities in a synchronously-starting cyclic manner, and in a cyclic or acyclic asynchronous manner, as requested each cycle by each of those data-link entities. Thus this protocol can be characterized as one which provides cyclic and acyclic access asynchronously but with a synchronous restart of each cycle. It includes the following significant changes with respect to the previous edition deletion of the former Type 6 fieldbus, and the placeholder for a Type 5 fieldbus data-link layer, for lack of market relevance; addition of new types of fieldbuses; division of this part into multiple parts numbered.

Keel en

Asendab EVS-EN 61158-4:2004  
 Asendatud EVS-EN 61158-4-12:2012

**EVS-EN 61158-4-14:2008**

Identne EN 61158-4-14:2008  
 ja identne IEC 61158-4-14:2007

**Industrial communication networks - Fieldbus specifications - Part 4-14: Data-link layer protocol specification - Type 14 elements**

It provides basic time-critical messaging communications between devices in an automation environment. This protocol provides communication opportunities to all participating data-link entities in a synchronously-starting cyclic manner, according to a pre-established schedule, and in a cyclic or acyclic asynchronous manner, as requested each cycle by each of those data-link entities. Thus this protocol can be characterized as one which provides cyclic and acyclic access asynchronously but with a synchronous restart of each cycle. It includes the following significant changes with respect to the previous edition deletion of the former Type 6 fieldbus, and the placeholder for a Type 5 fieldbus data-link layer, for lack of market relevance; addition of new types of fieldbuses; division of this part into multiple parts numbered.

Keel en

Asendab EVS-EN 61158-4:2004  
 Asendatud EVS-EN 61158-4-14:2012

**EVS-EN 61158-4-18:2008**

Identne EN 61158-4-18:2008

ja identne IEC 61158-4-18:2007

**Industrial communication networks - Fieldbus specifications - Part 4-18: Data-link layer protocol specification - Type 18 elements**

It provides basic time-critical messaging communications between devices in an automation environment. This protocol provides communication opportunities to all participating data-link entities in a synchronously-starting cyclic manner, according to a pre-established schedule, and in a cyclic or acyclic asynchronous manner, as requested each cycle by each of those data-link entities. Thus this protocol can be characterized as one which provides cyclic and acyclic access asynchronously but with a synchronous restart of each cycle. It includes the following significant changes with respect to the previous edition deletion of the former Type 6 fieldbus, and the placeholder for a Type 5 fieldbus data-link layer, for lack of market relevance; addition of new types of fieldbuses; division of this part into multiple parts numbered.

Keel en

Asendab EVS-EN 61158-4:2004

Asendatud EVS-EN 61158-4-18:2012

**EVS-EN 61158-4-19:2008**

Identne EN 61158-4-19:2008

ja identne IEC 61158-4-19:2007

**Industrial communication networks - Fieldbus specifications - Part 4-19: Data-link layer protocol specification - Type 19 elements**

It provides basic time-critical messaging communications between devices in an automation environment. This protocol provides communication opportunities to all participating data-link entities in a synchronously-starting cyclic manner, according to a pre-established schedule, and in a cyclic or acyclic asynchronous manner, as requested each cycle by each of those data-link entities. Thus this protocol can be characterized as one which provides cyclic and acyclic access asynchronously but with a synchronous restart of each cycle. It includes the following significant changes with respect to the previous edition deletion of the former Type 6 fieldbus, and the placeholder for a Type 5 fieldbus data-link layer, for lack of market relevance; addition of new types of fieldbuses; division of this part into multiple parts numbered.

Keel en

Asendab EVS-EN 61158-4:2004

Asendatud EVS-EN 61158-4-19:2012

**EVS-EN 61158-5-10:2008**

Identne EN 61158-5-10:2008

ja identne IEC 61158-5-10:2007

**Industrial communication networks - Fieldbus specifications - Part 5-10: Application layer service definition - Type 10 elements**

It provides user programs with a means to access the fieldbus communication environment. In this respect, the FAL can be viewed as a "window between corresponding application programs." This standard provides common elements for basic time-critical and non-time-critical messaging communications between application programs in an automation environment and material specific to type 10 fieldbus. The term "time-critical" is used to represent the presence of a time-window, within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant and possibly human life. It includes the following significant changes with respect to the previous edition deletion of the former Type 6 fieldbus, and the placeholder for a Type 5 fieldbus data-link layer, for lack of market relevance; addition of new types of fieldbuses; division of this part into multiple parts numbered.

Keel en

Asendab EVS-EN 61158-5:2004

Asendatud EVS-EN 61158-5-10:2012

## **EVS-EN 61158-5-12:2008**

Identne EN 61158-5-12:2008

ja identne IEC 61158-5-12:2007

### **Industrial communication networks - Fieldbus specifications - Part 5-12: Application layer service definition - Type 12 elements**

1.1 Overview The fieldbus Application Layer (FAL) provides user programs with a means to access the fieldbus communication environment. In this respect, the FAL can be viewed as a “window between corresponding application programs.” This standard provides common elements for basic time-critical and non-time-critical messaging communications between application programs in an automation environment and material specific to Type 12 fieldbus. The term “time-critical” is used to represent the presence of a time-window, within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant and possibly human life. This standard defines in an abstract way the externally visible service provided by the different Types of the fieldbus Application Layer in terms of a) an abstract model for defining application resources (objects) capable of being manipulated by users via the use of the FAL service, b) the primitive actions and events of the service; c) the parameters associated with each primitive action and event, and the form which they take; and d) the interrelationship between these actions and events, and their valid sequences. The purpose of this standard is to define the services provided to 1) the FAL user at the boundary between the user and the Application Layer of the Fieldbus Reference Model, and 2) Systems Management at the boundary between the Application Layer and Systems Management of the Fieldbus Reference Model. This standard specifies the structure and services of the IEC fieldbus Application Layer, in conformance with the OSI Basic Reference Model (ISO/IEC 7498) and the OSI Application Layer Structure (ISO/IEC 9545). FAL services and protocols are provided by FAL application-entities (AE) contained within the application processes. The FAL AE is composed of a set of object-oriented Application Service Elements (ASEs) and a Layer Management Entity (LME) that manages the AE. The ASEs provide communication services that operate on a set of related application process object (APO) classes. One of the FAL ASEs is a management ASE that provides a common set of services for the management of the instances of FAL classes. Although these services specify, from the perspective of applications, how request and responses are issued and delivered, they do not include a specification of what the requesting and responding applications are to do with them. That is, the behavioral aspects of the applications are not specified; only a definition of what requests and responses they can send/receive is specified. This permits greater flexibility to the FAL users in standardizing such object behavior. In addition to these services, some supporting services are also defined in this standard to provide access to the FAL to control certain aspects of its operation.

1.2 Specifications The principal objective of this standard is to specify the characteristics of conceptual application layer services suitable for time-critical communications, and thus supplement the OSI Basic Reference Model in guiding the development of application layer protocols for time-critical communications. A secondary objective is to provide migration paths from previously-existing industrial communications protocols. It is this latter objective which gives rise to the diversity of services standardized as the various Types of IEC 61158, and the

corresponding protocols standardized in subparts of IEC 61158-6. This specification may be used as the basis for formal Application Programming-Interfaces. Nevertheless, it is not a formal programming interface, and any such interface will need to address implementation issues not covered by this specification, including a) the sizes and octet ordering of various multi-octet service parameters, and b) the correlation of paired request and confirm, or indication and response, primitives.

1.3 Conformance This standard does not specify individual implementations or products, nor does it constrain the implementations of application layer entities within industrial automation systems. There is no conformance of equipment to this application layer service definition standard. Instead, conformance is achieved through implementation of conforming application layer protocols that fulfill any given Type of application layer services as defined in this standard.

Keel en

Asendab EVS-EN 61158-5:2004

Asendatud EVS-EN 61158-5-12:2012

## **EVS-EN 61158-5-14:2008**

Identne EN 61158-5-14:2008

ja identne IEC 61158-5-14:2007

### **Industrial communication networks - Fieldbus specifications - Part 5-14: Application layer service definition - Type 14 elements**

1.1 Overview The fieldbus application layer (FAL) provides user programs with a means to access the fieldbus communication environment. In this respect, the FAL can be viewed as a "window between corresponding application programs." This standard provides common elements for basic time-critical and non-time-critical messaging communications between application programs in an automation environment and material specific to Type 14 fieldbus. The term "time-critical" is used to represent the presence of a time-window, within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant and possibly human life. This standard defines in an abstract way the externally visible service provided by the Type 14 fieldbus application layer in terms of a) an abstract model for defining application resources (objects) capable of being manipulated by users via the use of the FAL service, b) the primitive actions and events of the service; c) the parameters associated with each primitive action and event, and the form which they take; and d) the interrelationship between these actions and events, and their valid sequences. The purpose of this standard is to define the services provided to 1) the FAL user at the boundary between the user and the application layer of the fieldbus reference model, and 2) Systems Management at the boundary between the application layer and Systems Management of the fieldbus reference model. This standard specifies the structure and services of the Type 14 fieldbus application layer, in conformance with the OSI Basic Reference Model (ISO/IEC 7498) and the OSI application layer structure (ISO/IEC 9545). FAL services and protocols are provided by FAL application-entities (AE) contained within the application processes. The FAL AE is composed of a set of object-oriented application service elements (ASEs) and a layer management entity (LME) that manages the AE. The ASEs provide communication services that operate on a set of related application process object (APO) classes. One of the FAL ASEs is a management ASE that provides a common set of services for the management of the instances of FAL classes. Although these services specify, from the perspective of applications, how request and responses are issued and delivered, they do not include a specification of what the requesting and responding applications are to do with them. That is, the behavioral aspects of the applications are not specified; only a definition of what requests and responses they can send/receive is specified. This permits greater flexibility to the FAL users in standardizing such object behavior. In addition to these services, some supporting services are also defined in this standard to provide access to the FAL to control certain aspects of its operation. 1.2 Specifications The principal objective of this standard is to specify the characteristics of conceptual application layer services suitable for time-critical communications, and thus supplement the OSI Basic Reference Model in guiding the development of application layer protocols for time-critical communications. A secondary objective is to provide migration paths from previously-existing industrial communications protocols. It is this latter objective which gives rise to the diversity of services standardized as the

various types of IEC 61158. This specification may be used as the basis for formal Application Programming-Interfaces. Nevertheless, it is not a formal programming interface, and any such interface will need to address implementation issues not covered by this specification, including a) the sizes and octet ordering of various multi-octet service parameters, and b) the correlation of paired request and confirm, or indication and response, primitives. 1.3 Conformance This standard does not specify individual implementations or products, nor do they constrain the implementations of application layer entities within industrial automation systems. There is no conformance of equipment to this application layer service definition standard. Instead, conformance is achieved through implementation of conforming application layer protocols that fulfill the Type 14 application layer services as defined in this standard.

Keel en

Asendab EVS-EN 61158-5:2004

Asendatud EVS-EN 61158-5-14:2012



## **EVS-EN 61158-5-15:2008**

Identne EN 61158-5-15:2008

ja identne IEC 61158-5-15:2007

### **Industrial communication networks - Fieldbus specifications - Part 5-15: Application layer service definition - Type 15 elements**

1.1 Overview In network communications, as in many fields of engineering, it is a fact that “one size does not fit all.” Engineering design is about making the right set of trade-offs, and these trade-offs must balance conflicting requirements such as simplicity, generality, ease of use, richness of features, performance, memory size and usage, scalability, determinism, and robustness. These trade-offs must be made in light of the types of information flow (e.g. periodic, one-to-many, request-reply, events), and the constraints imposed by the application and execution platforms. The Type 15 fieldbus provides two major communication mechanisms that complement each others to satisfy communication requirements in the field of automation: the Client/Server and the Publish/Subscribe paradigms. They can be used concurrently on the same device. Type 15 Client/Server operates in a Client/Server relationship. Its application layer service definitions and protocol specifications are independent of the underlying layers, and have been implemented on a variety of stacks and communication media, including EIA/TIA-232, EIA/TIA-422, EIA/TIA-425, HDLC (ISO 13239), fiber, TCP/IP, Wireless LANs and Radios. Type 15 Publish/Subscribe operates in a Publish/Subscribe relationship. Its application layer service definitions and protocol specifications are independent of the underlying layers and can be configured to provide reliable behaviour and support determinism. The most common stack is UDP/IP. The fieldbus application layer (FAL) provides user programs with a means to access the fieldbus communication environment. In this respect, the FAL can be viewed as a “window between corresponding application programs.” This part of IEC 61158 provides common elements for basic time-critical and non-time-critical messaging communications between application programs in an automation environment and material specific to Type 15 fieldbus. The term “time-critical” is used to represent the presence of a time-window, within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant and possibly human life. This part of IEC 61158 define in an abstract way the externally visible service provided by the Type 15 fieldbus application layer in terms of a) an abstract model for defining application resources (objects) capable of being manipulated by users via the use of the FAL service, b) the primitive actions and events of the service; c) the parameters associated with each primitive action and event, and the form which they take; and d) the interrelationship between these actions and events, and their valid sequences. The purpose of this part of IEC 61158 is to define the services provided to 1) the FAL user at the boundary between the user and the Application Layer of the Fieldbus Reference Model, and 2) Systems Management at the boundary between the Application Layer and Systems Management of the Fieldbus Reference Model. This part of IEC 61158 specifies the structure and services of the Type 15 IEC fieldbus Application Layer, in conformance with the OSI Basic Reference Model (ISO/IEC 7498) and the OSI Application Layer Structure (ISO/IEC 9545). FAL services and protocols are provided by FAL application-entities (AE) contained within the application processes. The FAL AE is composed of a set of object-oriented

Application Service Elements (ASEs) and a Layer Management Entity (LME) that manages the AE. The ASEs provide communication services that operate on a set of related application process object (APO) classes. One of the FAL ASEs is a management ASE that provides a common set of services for the management of the instances of FAL classes. Although these services specify, from the perspective of applications, how request and responses are issued and delivered, they do not include a specification of what the requesting and responding applications are to do with them. That is, the behavioral aspects of the applications are not specified; only a definition of what requests and responses they can send/receive is specified. This permits greater flexibility to the FAL users in standardizing such object behavior. In addition to these services, some supporting services are also defined in this standard to provide access to the FAL to control certain aspects of its operation.

1.2 Specifications The principal objective of this part of IEC 61158 is to specify the characteristics of conceptual application layer services suitable for time-critical communications, and thus supplement the OSI Basic Reference Model in guiding the development of application layer protocols for time-critical communications. A secondary objective is to provide migration paths from previously-existing industrial communications protocols. It is this latter objective which gives rise to the diversity of services standardized as the various Types of IEC 61158, and the corresponding protocols standardized in subparts of IEC 61158-6. This specification may be used as the basis for formal Application Programming-Interfaces. Nevertheless, it is not a formal programming interface, and any such interface will need to address implementation issues not covered by this specification, including a) the sizes and octet ordering of various multi-octet service parameters, and b) the correlation of paired request and confirm, or indication and response, primitives.

1.3 Conformance This part of IEC 61158 does not specify individual implementations or products, nor do they constrain the implementations of application layer entities within industrial automation systems. There is no conformance of equipment to this application layer service definition standard. Instead, conformance is achieved through implementation of conforming application layer protocols that fulfill the Type 15 application layer services as defined in this part of IEC 61158.

1.4 Type overview In network communications, as in many fields of engineering, it is a fact that “one size does not fit all.” Engineering design is about making the right set of trade-offs, and these trade-offs must balance conflicting requirements such as simplicity, generality, ease of use, richness of features, performance, memory size and usage, scalability, determinism, and robustness. These trade-offs must be made in light of the types of information flow (e.g. periodic, one-to-many, request-reply, events), and the constraints imposed by the application and execution platforms. The Type 15 fieldbus provides two major communication mechanisms that complement each others to satisfy communication requirements in the field of automation: the Client/Server and the Publish/Subscribe paradigms. They can be used concurrently on the same device. Type 15 Client/Server operates in a Client/Server relationship. Its application layer service definitions and protocol specifications are independent of the underlying layers, and have been implemented on a variety of stacks and communication media, including EIA/TIA-232, EIA/TIA-422, EIA/TIA-425, HDLC (ISO 13239), fiber, TCP/IP, Wireless LANs and Radios. Type 15 Publish/Subscribe operates in a Publish/Subscribe relationship. Its application layer service definitions and protocol specifications are independent of the underlying layers and can be

configured to provide reliable behavior and support determinism. The most common stack is UDP/IP.

Keel en

Asendab EVS-EN 61158-5:2004

Asendatud EVS-EN 61158-5-15:2012

## **EVS-EN 61158-5-18:2008**

Identne EN 61158-5-18:2008

ja identne IEC 61158-5-18:2007

### **Industrial communication networks - Fieldbus specifications - Part 5-18: Application layer service definition - Type 18 elements**

1.1 Overview The fieldbus application layer (FAL) provides user programs with a means to access the fieldbus communication environment. In this respect, the FAL can be viewed as a “window between corresponding application programs.” This part of IEC 61158 provides common elements for basic time-critical and non-time-critical messaging communications between application programs in an automation environment and material specific to Type 18 fieldbus. The term “time-critical” is used to represent the presence of a time-window, within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant and possibly human life. This part of IEC 61158 define in an abstract way the externally visible service provided by the Type 18 fieldbus application layer in terms of a) an abstract model for defining application resources (objects) capable of being manipulated by users via the use of the FAL service, b) the primitive actions and events of the service; c) the parameters associated with each primitive action and event, and the form which they take; and d) the interrelationship between these actions and events, and their valid sequences. The purpose of this part of IEC 61158 is to define the services provided to 1) the FAL user at the boundary between the user and the Application Layer of the Fieldbus Reference Model, and 2) Systems Management at the boundary between the Application Layer and Systems Management of the Fieldbus Reference Model. This part of IEC 61158 specifies the structure and services of the Type 18 IEC fieldbus Application Layer, in conformance with the OSI Basic Reference Model (ISO/IEC 7498) and the OSI Application Layer Structure (ISO/IEC 9545). FAL services and protocols are provided by FAL application-entities (AE) contained within the application processes. The FAL AE is composed of a set of object-oriented Application Service Elements (ASEs) and a Layer Management Entity (LME) that manages the AE. The ASEs provide communication services that operate on a set of related application process object (APO) classes. One of the FAL ASEs is a management ASE that provides a common set of services for the management of the instances of FAL classes. Although these services specify, from the perspective of applications, how request and responses are issued and delivered, they do not include a specification of what the requesting and responding applications are to do with them. That is, the behavioral aspects of the applications are not specified; only a definition of what requests and responses they can send/receive is specified. This permits greater flexibility to the FAL users in standardizing such object behavior. In addition to these services, some supporting services are also defined in this standard to provide access to the FAL to control certain aspects of its operation. 1.2 Specifications The principal objective of this part of IEC 61158 is to specify the characteristics of conceptual application layer services suitable for time-critical communications, and thus supplement the OSI Basic Reference Model in guiding the development of application layer protocols for time-critical communications. A secondary objective is to provide migration paths from previously-existing industrial communications protocols. It is this latter objective which gives rise to the diversity of services standardized as the

various Types of IEC 61158, and the corresponding protocols standardized in subparts of IEC 61158-6. This specification may be used as the basis for formal Application Programming-Interfaces. Nevertheless, it is not a formal programming interface, and any such interface will need to address implementation issues not covered by this specification, including a) the sizes and octet ordering of various multi-octet service parameters, and b) the correlation of paired request and confirm, or indication and response, primitives. 1.3 Conformance This part of IEC 61158 does not specify individual implementations or products, nor do they constrain the implementations of application layer entities within industrial automation systems. There is no conformance of equipment to this application layer service definition standard. Instead, conformance is achieved through implementation of conforming application layer protocols that fulfill the Type 18 application layer services as defined in this part of IEC 61158.

Keel en

Asendab EVS-EN 61158-5:2004

Asendatud EVS-EN 61158-5-18:2012

## **EVS-EN 61158-5-19:2008**

Identne EN 61158-5-19:2008

ja identne IEC 61158-5-19:2007

### **Industrial communication networks - Fieldbus specifications - Part 5-19: Application layer service definition - Type 19 elements**

1.1 Overview The fieldbus application layer (FAL) provides user programs with a means to access the fieldbus communication environment. In this respect, the FAL can be viewed as a "window between corresponding application programs." This standard provides common elements for basic time-critical and non-time-critical messaging communications between application programs in an automation environment and material specific to Type 19 fieldbus. The term "time-critical" is used to represent the presence of a time-window, within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant and possibly human life. This standard defines in an abstract way the externally visible service provided by the fieldbus application layer in terms of a) an abstract model for defining application resources (objects) capable of being manipulated by users via the use of the FAL service, b) the primitive actions and events of the service; c) the parameters associated with each primitive action and event, and the form which they take; and d) the interrelationship between these actions and events, and their valid sequences. The purpose of this standard is to define the services provided to 1) the FAL user at the boundary between the user and the application layer of the fieldbus reference model, and 2) Systems Management at the boundary between the application layer and Systems Management of the fieldbus reference model. This standard specifies the structure and services of the fieldbus application layer, in conformance with the OSI Basic Reference Model (ISO/IEC 7498) and the OSI application layer structure (ISO/IEC 9545). FAL services and protocols are provided by FAL application-entities (AE) contained within the application processes. The FAL AE is composed of a set of object-oriented application service elements (ASEs) and a layer management entity (LME) that manages the AE. The ASEs provide communication services that operate on a set of related application process object (APO) classes. One of the FAL ASEs is a management ASE that provides a common set of services for the management of the instances of FAL classes. Although these services specify, from the perspective of applications, how request and responses are issued and delivered, they do not include a specification of what the requesting and responding applications are to do with them. That is, the behavioral aspects of the applications are not specified; only a definition of what requests and responses they can send/receive is specified. This permits greater flexibility to the FAL users in standardizing such object behavior. In addition to these services, some supporting services are also defined in this standard to provide access to the FAL to control certain aspects of its operation. 1.2 Specifications The principal objective of this standard is to specify the characteristics of conceptual application layer services suitable for time-critical communications, and thus supplement the OSI Basic Reference Model in guiding the development of application layer protocols for time-critical communications. A secondary objective is to provide migration paths from previously-existing industrial communications protocols. It is this latter objective which gives rise to the diversity of services standardized as the various Types of IEC 61158, and the

corresponding protocols standardized in subparts of IEC 61158-6. This specification may be used as the basis for formal application programming interfaces. Nevertheless, it is not a formal programming interface, and any such interface will need to address implementation issues not covered by this specification, including a) the sizes and octet ordering of various multi-octet service parameters, and b) the correlation of paired request and confirm, or indication and response, primitives. 1.3 Conformance This standard does not specify individual implementations or products, nor does it constrain the implementations of application layer entities within industrial automation systems. There is no conformance of equipment to this application layer service definition standard. Instead, conformance is achieved through implementation of conforming application layer protocols that fulfill the application layer services as defined in this standard.

Keel en

Asendab EVS-EN 61158-5:2004

Asendatud EVS-EN 61158-5-19:2012

## **EVS-EN 61158-5-20:2008**

Identne EN 61158-5-20:2008

ja identne IEC 61158-5-20:2007

### **Industrial communication networks - Fieldbus specifications - Part 5-20: Application layer service definition -Type 20 elements**

1.1 Overview The fieldbus Application Layer (FAL) provides user programs with a means to access the fieldbus communication environment. In this respect, the FAL can be viewed as a “window between corresponding application programs.” This part of IEC 61158 provides common elements for basic time-critical and non-time-critical messaging communications between application programs in an automation environment and material specific to Type 20 fieldbus. The term “time-critical” is used to represent the presence of a time-window, within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant and possibly human life. This standard defines in an abstract way the externally visible service provided by the different Types of the fieldbus Application Layer in terms of a) an abstract model for defining application resources (objects) capable of being manipulated by users via the use of the FAL service, b) the primitive actions and events of the service; c) the parameters associated with each primitive action and event, and the form which they take; and d) the interrelationship between these actions and events, and their valid sequences. The purpose of this standard is to define the services provided to 1) the FAL user at the boundary between the user and the Application Layer of the Fieldbus Reference Model, and 2) Systems Management at the boundary between the Application Layer and Systems Management of the Fieldbus Reference Model. This standard specifies the structure and services of the IEC fieldbus Application Layer, in conformance with the OSI Basic Reference Model (ISO/IEC 7498) and the OSI Application Layer Structure (ISO/IEC 9545). FAL services and protocols are provided by FAL application-entities (AE) contained within the application processes. The FAL AE is composed of a set of object-oriented Application Service Elements (ASEs) and a Layer Management Entity (LME) that manages the AE. The ASEs provide communication services that operate on a set of related application process object (APO) classes. One of the FAL ASEs is a management ASE that provides a common set of services for the management of the instances of FAL classes. Although these services specify, from the perspective of applications, how request and responses are issued and delivered, they do not include a specification of what the requesting and responding applications are to do with them. That is, the behavioral aspects of the applications are not specified; only a definition of what requests and responses they can send/receive is specified. This permits greater flexibility to the FAL users in standardizing such object behavior. In addition to these services, some supporting services are also defined in this standard to provide access to the FAL to control certain aspects of its operation. 1.2 Specifications The principal objective of this standard is to specify the characteristics of conceptual application layer services suitable for time-critical communications, and thus supplement the OSI Basic Reference Model in guiding the development of application layer protocols for time-critical communications. A secondary objective is to provide migration paths from previously-existing industrial communications protocols. It is this latter objective which gives rise to the diversity of services standardized as the various types of IEC 61158. This

specification may be used as the basis for formal Application Programming-Interfaces. Nevertheless, it is not a formal programming interface, and any such interface will need to address implementation issues not covered by this specification, including a) the sizes and octet ordering of various multi-octet service parameters, and b) the correlation of paired request and confirm, or indication and response, primitives. 1.3 Conformance This standard does not specify individual implementations or products, nor do they constrain the implementations of application layer entities within industrial automation systems. There is no conformance of equipment to this application layer service definition standard. Instead, conformance is achieved through implementation of conforming application layer protocols that fulfill the Type 20 application layer services as defined in this standard.

Keel en

Asendab EVS-EN 61158-5:2004

Asendatud EVS-EN 61158-5-20:2012

### **KAVANDITE ARVAMUSKÜSITLUS**

#### **FprEN 60519-4**

Identne FprEN 60519-4:2012

ja identne IEC 60519-4:201X

Tähtaeg 29.08.2012

#### **Ohutus elekterkuumutuspaigaldistes. Osa 4: Erinõuded kaarahjupaigaldistele**

This part of IEC 60519 provides particular safety requirements for electric arc furnace installations and its operating and maintenance personnel. These safety provisions concern the protection of persons and the environment against dangers of electrical origin and also against certain dangers of non-electrical origin. This standard is applicable to electroheating installations such as: 1. Furnaces for direct arc heating, forming arcs between the electrode and metal such as the electric arc furnace using alternating current (EAFac) or direct current (EAFdc), and ladle furnace (LF); 2. Furnaces for arc-resistance heating forming arcs between the electrode and the charge material or heating the charge material by the Joule effect, such as the submerged arc furnace using alternating current (SAFac), or direct current (SAFdc).

Keel en

Asendab EVS-EN 60519-4:2006

#### **FprEN 60974-10**

Identne FprEN 60974-10:2012

ja identne IEC 60974-10:201X

Tähtaeg 29.08.2012

#### **Kaarkeevitusseadmed. Osa 10: Elektromagnetilise ühilduvuse nõuded**

This part of IEC 60974 specifies a) applicable standards and test methods for radio-frequency (RF) emissions; b) applicable standards and test methods for harmonic current emission, voltage fluctuations and flicker; c) immunity requirements and test methods for continuous and transient, conducted and radiated disturbances including electrostatic discharges. This standard is applicable to equipment for arc welding and allied processes, including power sources and ancillary equipment, for example wire feeders, liquid cooling systems and arc striking and stabilizing devices. NOTE 1 Allied processes are, for example, plasma cutting and arc stud welding. NOTE 2 This standard does not specify basic safety requirements for arc welding equipment such as protection against electric shock, unsafe operation, insulation coordination and related dielectric tests. Arc welding equipment type tested in accordance with, and which has met the requirements of, this standard is considered to be in compliance for all applications.

Keel en

Asendab EVS-EN 60974-10:2008

#### **FprEN ISO 28721-4**

Identne FprEN ISO 28721-4:2012

ja identne ISO 28721-4:2010

Tähtaeg 29.08.2012

#### **Vitreous and porcelain enamels - Glass-lined apparatus for process plants - Part 4: Quality requirements for glass-lined flanged steel pipes and flanged steel fittings (ISO 28721-4:2010)**

This part of ISO 28721 specifies the quality requirements for glass-lined flanged steel pipes and flanged steel fittings used for process plants.

Keel en

#### **prEN 12814-3**

Identne prEN 12814-3:2012

Tähtaeg 29.08.2012

#### **Testing of welded joints in thermoplastics semi-finished products - Part 3: Tensile creep test**

This standard specifies the dimensions, the method of sampling and the preparation of the test specimens, and the conditions for performing the tensile creep test perpendicular to the weld in order to determine the long term tensile welding factor. A tensile creep test may be used in conjunction with other tests (e.g. bend test, tensile test, macrographic examination...) to assess the performance of welded assemblies, made from thermoplastics materials. The test is applicable to welded assemblies made from thermoplastics materials filled or unfilled such as tubes and fittings, sheets, plates and profiles, but not reinforced, irrespective of the welding process used.

Keel en

Asendab EVS-EN 12814-3:2000; EVS-EN 12814-3:2000/A1:2005

#### **prEN 15339-1**

Identne prEN 15339-1:2012

Tähtaeg 29.08.2012

#### **Thermal spraying - Safety requirements for thermal spraying equipment - Part 1: General requirements**

This part of EN 15339 specifies and indicates safety requirements of machines, machine accessories, and equipment for thermal spraying. The provisions stated in this part of EN 15339 are intended for the designer, the integrator, and the user of thermal spray equipment. Safety requirements of specific and auxiliary components of a thermal spray system will be focused in further parts. (For details, see Clause 3).

Keel en

#### **prEN 15339-3**

Identne prEN 15339-3:2012

Tähtaeg 29.08.2012

#### **Thermal spraying - Safety requirements for thermal spraying equipment - Part 3: Torches for thermal spraying and their connection and supply units**

This part of EN 15339 specifies safety requirements of machines and equipment for thermal spraying, in this case of spray torches, gas hoses, hose assemblies and their current and water junctions in junction and monitoring boxes and power sources. Equipment and storage for gas and liquid fuel supply are not in the scope of this part of EN 15339, they are presented in prEN 15339-4. This part of EN 15339 should be used in conjunction with prEN 15339-1, which deals with general aspects when designing, manufacture, and/or putting in service of machines or equipment and with the responsibility to issue the CE Conformity Declaration. Spraying equipment for specific thermal spraying processes, induction plasma spraying, water stabilised plasma spraying and vacuum plasma spraying are not within the scope of this part of EN 15339.

Keel en

#### **prEN 15339-4**

Identne prEN 15339-4:2012

Tähtaeg 29.08.2012

#### **Thermal spraying - Safety requirements for thermal spraying equipment - Part 4: Gas and liquid fuel supply**

This part of EN 15339 specifies safety requirements of machines and equipment for thermal spraying, in this case of gas supply including supply of liquid fuels. This part of EN 15339 should be used in conjunction with prEN 15339-1, which deals with general aspects when designing, manufacturing, and/or putting in service of machines or equipment and with the responsibility for issuing the CE Conformity Declaration. Generally, the requirements of EU Directive 94/9/EC [1] are valid for the use of this European Standard.

Keel en

#### **prEN 15339-5**

Identne prEN 15339-5:2012

Tähtaeg 29.08.2012

#### **Thermal spraying - Safety requirements for thermal spraying equipment - Part 5: Powder and wire feed units**

This part of EN 15339 specifies safety requirements of machines and equipment for thermal spraying, in this case of gas supply including supply of liquid fuels. This part of EN 15339 should be used in conjunction with prEN 15339-1, which deals with general aspects when designing, manufacturing, and/or putting in service of machines or equipment and with the responsibility for issuing the CE Conformity Declaration. Generally, the requirements of EU Directive 94/9/EC [1] are valid for the use of this European Standard.

Keel en

## **27 ELEKTRI- JA SOOJUSENERGEETIKA**

### **KAVANDITE ARVAMUSKÜSITLUS**

#### **FprEN 60904-8**

Identne FprEN 60904-8:2012

ja identne IEC 60904-8:201X

Tähtaeg 29.08.2012

#### **Photovoltaic devices - Part 8: Measurement of spectral response of a photovoltaic (PV) device**

This part of IEC 60904 gives guidance for the measurement of the spectral response of both linear and non-linear photovoltaic devices. It is only applicable to single-junction devices. The spectral response of a photovoltaic device is used for the correction of the spectral mismatch if a solar cell is calibrated in a spectrum that differs from the reference spectrum and against a reference device with a different spectral response. This procedure is given in IEC 60904-7. Also, the spectral response of a photovoltaic device is used in cell development and cell analysis, as it provides a measure of recombination and other processes occurring inside the semiconductor or cell material system.

Keel en

Asendab EVS-EN 60904-8:2002

## **29 ELEKTROTEHNIKA**

### **UUED STANDARDID JA PUBLIKATSIOONID**

#### **EVS-EN 50149:2012**

Hind 14,69

Identne EN 50149:2012

#### **Raudteealased rakendused. Püsipaigaldised. Elektertransport. Vasest ja vasesulamitest kontaktjuhtmed**

This European Standard specifies the characteristics of copper and copper alloy wires of cross sections of 80 mm<sup>2</sup>, 100 mm<sup>2</sup>, 107 mm<sup>2</sup>, 120 mm<sup>2</sup> and 150 mm<sup>2</sup> for use on overhead contact lines. It establishes the product characteristics, the test methods, checking procedures to be used with the wires, together with the ordering and delivery condition.

Keel en

Asendab EVS-EN 50149:2002; EVS-EN

50149:2002/AC:2010; EVS-EN 50149:2002/AC:2011

**EVS-EN 60432-2:2002/A2:2012**

Hind 5,62

Identne EN 60432-2:2000/A2:2012

ja identne IEC 60432-2:1999/A2:2012

**Hõõglambid. Ohutusnõuded. Osa 2:****Halogeenhõõglambid kasutamiseks majapidamises ja muul taolisel üldisel valgustusotstarbel**

Specifies the safety and the related interchangeability requirements of tungsten halogen lamps for general lighting service. Covers those tungsten halogen lamps that are used as direct replacements for conventional tungsten filament lamps as well as new tungsten halogen lamps which have no correspondence in IEC 432-1, but for which the safety and interchangeability requirements are treated by this standard in conjunction with IEC 432-1.

Keel en

**EVS-EN 60811-100:2012**

Hind 8,01

Identne EN 60811-100:2012

ja identne IEC 60811-100:2012

**Electric and optical fibre cables - Test methods for non-metallic materials - Part 100: General**

This Part 100 of IEC 60811 describes general requirements and considerations that are applicable to all the test methods given in the particular parts, unless otherwise specified.

Keel en

Asendab EVS-EN 60811-2-1:2001; EVS-EN 60811-3-1:2001; EVS-EN 60811-3-2:2001; EVS-EN 60811-5-1:2001; EVS-EN 60811-1-2:2001/A2:2002; EVS-EN 60811-1-1:2001/A1:2002; EVS-EN 60811-1-3:2001/A1:2002; EVS-EN 60811-1-4:2001/A2:2002; EVS-EN 60811-2-1:2001/A1:2002; EVS-EN 6

**EVS-EN 60811-201:2012**

Hind 8,01

Identne EN 60811-201:2012

ja identne IEC 60811-201:2012

**Electric and optical fibre cables - Test methods for non-metallic materials - Part 201: General tests - Measurement of insulation thickness**

This Part 201 of IEC 60811 gives the methods for measuring the insulation thicknesses which apply to the most common types of insulating compounds (cross-linked, PVC, PE, PP, etc.).

Keel en

Asendab EVS-EN 60811-1-1:2001; EVS-EN 60811-1-1:2001/A1:2002

**EVS-EN 60811-202:2012**

Hind 8,01

Identne EN 60811-202:2012

ja identne IEC 60811-202:2012

**Electric and optical fibre cables - Test methods for non-metallic materials - Part 202: General tests - Measurement of thickness of non-metallic sheath**

This Part 202 of IEC 60811 gives the methods for measuring thicknesses of non-metallic sheath which apply to the most common types of sheathing compounds (cross-linked, PVC, PE, PP, etc.).

Keel en

Asendab EVS-EN 60811-1-1:2001; EVS-EN 60811-1-1:2001/A1:2002

**EVS-EN 60811-203:2012**

Hind 6,47

Identne EN 60811-203:2012

ja identne IEC 60811-203:2012

**Electric and optical fibre cables - Test methods for non-metallic materials - Part 203: General tests - Measurement of overall dimensions**

This Part 203 of IEC 60811 gives the methods for measuring overall dimensions and is applicable to all types of cable, circular and flat.

Keel en

Asendab EVS-EN 60811-1-1:2001; EVS-EN 60811-1-1:2001/A1:2002

**EVS-EN 60811-301:2012**

Hind 6,47

Identne EN 60811-301:2012

ja identne IEC 60811-301:2012

**Electric and optical fibre cables - Test methods for non-metallic materials - Part 301: Electrical tests - Measurement of the permittivity at 23 °C of filling compounds**

This Part 301 of IEC 60811 gives the procedure to determine the permittivity at 23 °C which typically applies to filling compounds used for optical cables, communication cables and optical fibre cables.

Keel en

Asendab EVS-EN 60811-5-1:2001; EVS-EN 60811-5-1:2001/A1:2004

**EVS-EN 60811-302:2012**

Hind 6,47

Identne EN 60811-302:2012

ja identne IEC 60811-302:2012

**Electric and optical fibre cables - Test methods for non-metallic materials - Part 302: Electrical tests - Measurement of the d.c. resistivity at 23 °C and 100 °C of filling compounds**

This Part 302 of IEC 60811 gives the procedure to examine the d.c. resistivity at 23 °C and 100 °C which typically applies to filling compounds used for communication cables and optical fibre cables.

Keel en

Asendab EVS-EN 60811-5-1:2001; EVS-EN 60811-5-1:2001/A1:2004

**EVS-EN 60811-401:2012**

Hind 10,9

Identne EN 60811-401:2012

ja identne IEC 60811-401:2012

**Electric and optical fibre cables - Test methods for non-metallic materials - Part 401: Miscellaneous tests - Thermal ageing methods - Ageing in an air oven**

This Part 401 of IEC 60811 specifies the procedure for ageing in an air oven, which typically applies to crosslinked and thermoplastic compounds used for insulating and sheathing materials.

Keel en

Asendab EVS-EN 60811-1-2:2001; EVS-EN 60811-1-2:2001/A2:2002

**EVS-EN 60811-402:2012**

Hind 7,38

Identne EN 60811-402:2012

ja identne IEC 60811-402:2012

**Electric and optical fibre cables - Test methods for non-metallic materials - Part 402: Miscellaneous tests - Water absorption tests**

This Part 402 of IEC 60811 describes water absorption tests which typically apply to crosslinked and thermoplastic compounds used for insulating and sheathing materials.

Keel en

Asendab EVS-EN 60811-1-3:2001; EVS-EN 60811-1-3:2001/A1:2002

**EVS-EN 60811-403:2012**

Hind 8,01

Identne EN 60811-403:2012

ja identne IEC 60811-403:2012

**Electric and optical fibre cables - Test methods for non-metallic materials - Part 403: Miscellaneous tests - Ozone resistance tests on cross-linked compounds**

This Part 403 of IEC 60811 specifies the method for the ozone resistance test, which typically applies to cross-linked compounds.

Keel en

Asendab EVS-EN 60811-2-1:2001; EVS-EN 60811-2-1:2001/A1:2002

**EVS-EN 60811-404:2012**

Hind 6,47

Identne EN 60811-404:2012

ja identne IEC 60811-404:2012

**Electric and optical fibre cables - Test methods for non-metallic materials - Part 404: Miscellaneous tests - Mineral oil immersion tests for sheaths**

This Part 404 of IEC 60811 specifies the method for a mineral oil immersion test, which typically applies to cross-linked compounds used for sheathing materials.

Keel en

Asendab EVS-EN 60811-2-1:2001; EVS-EN 60811-2-1:2001/A1:2002

**EVS-EN 60811-405:2012**

Hind 6,47

Identne EN 60811-405:2012

ja identne IEC 60811-405:2012

**Electric and optical fibre cables - Test methods for non-metallic materials - Part 405: Miscellaneous tests - Thermal stability test for PVC insulations and PVC sheaths**

This Part 405 of IEC 60811 specifies the procedure for the thermal stability test which applies to PVC compounds.

Keel en

Asendab EVS-EN 60811-3-2:2001; EVS-EN 60811-3-2:2001/A2:2004

**EVS-EN 60811-406:2012**

Hind 9,49

Identne EN 60811-406:2012

ja identne IEC 60811-406:2012

**Electric and optical fibre cables - Test methods for non-metallic materials - Part 406: Miscellaneous tests - Resistance to stress cracking of polyethylene and polypropylene compounds**

This Part 406 of IEC 60811 gives the procedure for evaluating the resistance to stress cracking of polyethylene and polypropylene compounds which are typically used for communication and optical fibre cables.

Keel en

Asendab EVS-EN 60811-4-1:2004

**EVS-EN 60811-407:2012**

Hind 6,47

Identne EN 60811-407:2012

ja identne IEC 60811-407:2012

**Electric and optical fibre cables - Test methods for non-metallic materials - Part 407: Miscellaneous tests - Measurement of mass increase of polyethylene and polypropylene compounds**

This Part 407 of IEC 60811 gives the procedure to examine possible interaction between insulation material and filling compound of filled cable.

Keel en

Asendab EVS-EN 60811-4-2:2005

**EVS-EN 60811-408:2012**

Hind 7,38

Identne EN 60811-408:2012

ja identne IEC 60811-408:2012

**Electric and optical fibre cables - Test methods for non-metallic materials - Part 408: Miscellaneous tests - Long-term stability test of polyethylene and polypropylene compounds**

This Part 408 of IEC 60811 gives the procedure to establish as to whether or not the quality of a cable's components will be satisfactory over the proposed life of a communication cable. This test is considered only as a material selection test to ensure that the chosen materials are satisfactory for the intended life of the cable. The test duration makes the test unsuitable for routine quality control testing; one method found suitable for monitoring raw materials is given in IEC 60811-410.

Keel en

Asendab EVS-EN 60811-4-2:2005

**EVS-EN 60811-409:2012**

Hind 8,72

Identne EN 60811-409:2012

ja identne IEC 60811-409:2012

**Electric and optical fibre cables - Test methods for non-metallic materials - Part 409: Miscellaneous tests - Loss of mass test for thermoplastic insulations and sheaths**

This Part 409 of IEC 60811 gives the procedure for measuring the loss of mass which normally applies to PVC insulations and sheaths.

Keel en

Asendab EVS-EN 60811-3-2:2001; EVS-EN 60811-3-2:2001/A2:2004



**EVS-EN 60811-410:2012**

Hind 8,01

Identne EN 60811-410:2012

ja identne IEC 60811-410:2012

**Electric and optical fibre cables - Test methods for non-metallic materials - Part 410: Miscellaneous tests - Test method for copper-catalyzed oxidative degradation of polyolefin insulated conductors**

This Part 410 of IEC 60811 gives the procedure for copper-catalyzed oxidative degradation of a polyolefin, which is typically used for insulation in communication cables. Full test conditions, such as temperature, duration, etc. and full test requirements are not specified in this standard; it is intended that they should be specified by the standard dealing with the relevant type of cable.

Keel en

Asendab EVS-EN 60811-4-2:2005

**EVS-EN 60811-411:2012**

Hind 6,47

Identne EN 60811-411:2012

ja identne IEC 60811-411:2012

**Electric and optical fibre cables - Test methods for non-metallic materials - Part 411: Miscellaneous tests - Low temperature brittleness of filling compounds**

This Part 411 of IEC 60811 gives the procedure to evaluate lower temperature brittleness which typically applies to filling compounds used for communication and optical fibre cables.

Keel en

Asendab EVS-EN 60811-5-1:2001; EVS-EN 60811-5-1:2001/A1:2004

**EVS-EN 60811-412:2012**

Hind 7,38

Identne EN 60811-412:2012

ja identne IEC 60811-412:2012

**Electric and optical fibre cables - Test methods for non-metallic materials - Part 412: Miscellaneous tests - Thermal ageing methods - Ageing in an air bomb**

This Part 412 of IEC 60811 gives the procedure for ageing in an air bomb, which typically applies to crosslinked and thermoplastic compounds used for insulating and sheathing materials.

Keel en

Asendab EVS-EN 60811-1-2:2001; EVS-EN 60811-1-2:2001/A2:2002

**EVS-EN 60811-501:2012**

Hind 10,19

Identne EN 60811-501:2012

ja identne IEC 60811-501:2012

**Electric and optical fibre cables - Test methods for non-metallic materials - Part 501: Mechanical tests - Tests for determining the mechanical properties of insulating and sheathing compounds**

This Part 501 of IEC 60811 gives the procedure for determining the mechanical properties, which typically applies to cross-linked and thermoplastic compounds used for insulating and sheathing materials.

Keel en

Asendab EVS-EN 60811-1-1:2001/A1:2002; EVS-EN 60811-1-1:2001

**EVS-EN 60811-502:2012**

Hind 6,47

Identne EN 60811-502:2012

ja identne IEC 60811-502:2012

**Electric and optical fibre cables - Test methods for non-metallic materials - Part 502: Mechanical tests - Shrinkage test for insulations**

This Part 502 of IEC 60811 gives the test method for the shrinkage for insulations.

Keel en

Asendab EVS-EN 60811-1-3:2001; EVS-EN 60811-1-3:2001/A1:2002

**EVS-EN 60811-503:2012**

Hind 6,47

Identne EN 60811-503:2012

ja identne IEC 60811-503:2012

**Electric and optical fibre cables - Test methods for non-metallic materials - Part 503: Mechanical tests - Shrinkage test for sheaths**

This Part 503 of IEC 60811 gives the test method for the shrinkage for sheaths.

Keel en

Asendab EVS-EN 60811-1-3:2001; EVS-EN 60811-1-3:2001/A1:2002

**EVS-EN 60811-504:2012**

Hind 7,38

Identne EN 60811-504:2012

ja identne IEC 60811-504:2012

**Electric and optical fibre cables - Test methods for non-metallic materials - Part 504: Mechanical tests - Bending tests at low temperature for insulation and sheaths**

This Part 504 of IEC 60811 gives the procedure for performing bending tests at low temperature on extruded insulations and sheaths.

Keel en

Asendab EVS-EN 60811-1-4:2001; EVS-EN 60811-1-4:2001/A2:2002

**EVS-EN 60811-505:2012**

Hind 8,01

Identne EN 60811-505:2012

ja identne IEC 60811-505:2012

**Electric and optical fibre cables - Test methods for non-metallic materials - Part 505: Mechanical tests - Elongation at low temperature for insulations and sheaths**

This Part 505 of IEC 60811 gives the procedure for performing elongation tests at low temperature on extruded insulations and sheaths.

Keel en

Asendab EVS-EN 60811-1-4:2001; EVS-EN 60811-1-4:2001/A2:2002

**EVS-EN 60811-506:2012**

Hind 7,38

Identne EN 60811-506:2012

ja identne IEC 60811-506:2012

**Electric and optical fibre cables - Test methods for non-metallic materials - Part 506: Mechanical tests - Impact test at low temperature for insulations and sheaths**

This Part 506 of IEC 60811 gives the procedure for performing impact tests at low temperature on extruded insulations and sheaths.

Keel en

Asendab EVS-EN 60811-1-4:2001; EVS-EN 60811-1-4:2001/A2:2002

**EVS-EN 60811-507:2012**

Hind 7,38

Identne EN 60811-507:2012

ja identne IEC 60811-507:2012

**Electric and optical fibre cables - Test methods for non-metallic materials - Part 507: Mechanical tests - Hot set test for cross-linked materials**

This Part 507 of IEC 60811 gives the procedure for the hot set test, which typically applies to cross-linkable compounds used for insulating and sheathing materials.

Keel en

Asendab EVS-EN 60811-2-1:2001; EVS-EN 60811-2-1:2001/A1:2002

**EVS-EN 60811-508:2012**

Hind 10,19

Identne EN 60811-508:2012

ja identne IEC 60811-508:2012

**Electric and optical fibre cables - Test methods for non-metallic materials - Part 508: Mechanical tests - Pressure test at high temperature for insulation and sheaths**

This Part 508 of IEC 60811 gives the procedure for a pressure test at high temperature, which typically applies to thermoplastic compounds used for insulating and sheathing materials.

Keel en

Asendab EVS-EN 60811-3-1:2001; EVS-EN 60811-3-1:2001/A2:2002

**EVS-EN 60811-509:2012**

Hind 8,01

Identne EN 60811-509:2012

ja identne IEC 60811-509:2012

**Electric and optical fibre cables - Test methods for non-metallic materials - Part 509: Mechanical tests - Test for resistance of insulations and sheaths to cracking (heat shock test)**

This Part 509 of IEC 60811 gives the procedure for the test for resistance of insulations and sheaths to cracking at an elevated temperature.

Keel en

Asendab EVS-EN 60811-3-1:2001; EVS-EN 60811-3-1:2001/A2:2002

**EVS-EN 60811-510:2012**

Hind 6,47

Identne EN 60811-510:2012

ja identne IEC 60811-510:2012

**Electric and optical fibre cables - Test methods for non-metallic materials - Part 510: Mechanical tests - Methods specific to polyethylene and polypropylene compounds - Wrapping test after thermal ageing in air**

This Part 510 of IEC 60811 specifies the test method for a wrapping test after thermal ageing in air. This test method applies specifically to polyolefin insulation in communication cables. This test is intended for polyolefin insulations of unfilled cables and of dry cores for filled cables, where the insulation has a wall thickness of less than or equal to 0,8 mm.

Keel en

Asendab EVS-EN 60811-4-2:2005

**EVS-EN 60811-511:2012**

Hind 8,01

Identne EN 60811-511:2012

ja identne IEC 60811-511:2012

**Electric and optical fibre cables - Test methods for non-metallic materials - Part 511: Mechanical tests - Measurement of the melt flow index of polyethylene compounds**

This Part 511 of IEC 60811 describes the procedure for the measurement of the melt flow index for polyethylene compounds.

Keel en

Asendab EVS-EN 60811-4-1:2004

**EVS-EN 60811-512:2012**

Hind 6,47

Identne EN 60811-512:2012

ja identne IEC 60811-512:2012

**Electric and optical fibre cables - Test methods for non-metallic materials - Part 512: Mechanical tests - Tensile strength and elongation at break after conditioning at elevated temperature - Methods specific to polyethylene and polypropylene compounds**

This Part 512 of IEC 60811 describes the procedure for testing tensile strength and elongation at break after conditioning at elevated temperature. It is specific to polyethylene and polypropylene compounds. This test is intended for samples from filled cables, of polyolefin insulations with a wall thickness of

Keel en

Asendab EVS-EN 60811-4-2:2005

**EVS-EN 60811-513:2012**

Hind 6,47

Identne EN 60811-513:2012

ja identne IEC 60811-513:2012

**Electric and optical fibre cables - Test methods for non-metallic materials - Part 513: Mechanical tests - Methods specific to polyethylene and polypropylene compounds - Wrapping test after conditioning**

This Part 513 of IEC 60811 gives procedures for a wrapping test after conditioning at elevated temperature. This test method applies specifically to polyethylene and polypropylene insulation. This test is intended for samples from filled cables of polyolefin insulation having a wall thickness of less than or equal to 0,8 mm.

Keel en

Asendab EVS-EN 60811-4-2:2005

**EVS-EN 60811-601:2012**

Hind 8,72

Identne EN 60811-601:2012

ja identne IEC 60811-601:2012

**Electric and optical fibre cables - Test methods for non-metallic materials - Part 601: Physical tests - Measurement of the drop point of filling compounds**

This Part 601 of IEC 60811 specifies the test procedure for measuring the drop point of filling compounds.

Keel en

Asendab EVS-EN 60811-5-1:2001; EVS-EN 60811-5-1:2001/A1:2004

**EVS-EN 60811-602:2012**

Hind 7,38

Identne EN 60811-602:2012

ja identne IEC 60811-602:2012

**Electric and optical fibre cables - Test methods for non-metallic materials - Part 602: Physical tests - Separation of oil in filling compounds**

This Part 602 of IEC 60811 gives the test methods for separation of oil in filling compounds.

Keel en

Asendab EVS-EN 60811-5-1:2001; EVS-EN 60811-5-1:2001/A1:2004

**EVS-EN 60811-603:2012**

Hind 7,38

Identne EN 60811-603:2012

ja identne IEC 60811-603:2012

**Electric and optical fibre cables - Test methods for non-metallic materials - Part 603: Physical tests - Measurement of total acid number of filling compounds**

This Part 603 of IEC 60811 gives the test methods to examine the filling compound for corrosive elements.

Keel en

Asendab EVS-EN 60811-5-1:2001/A1:2004; EVS-EN 60811-5-1:2001

**EVS-EN 60811-604:2012**

Hind 6,47

Identne EN 60811-604:2012

ja identne IEC 60811-604:2012

**Electric and optical fibre cables - Test methods for non-metallic materials - Part 604: Physical tests - Measurement of absence of corrosive components in filling compounds**

This Part 604 of IEC 60811 indicates the effect of the filling compound when in contact with the metallic parts of the cable.

Keel en

Asendab EVS-EN 60811-5-1:2001; EVS-EN 60811-5-1:2001/A1:2004

**EVS-EN 60811-605:2012**

Hind 7,38

Identne EN 60811-605:2012

ja identne IEC 60811-605:2012

**Electric and optical fibre cables - Test methods for non-metallic materials - Part 605: Physical tests - Measurement of carbon black and/or mineral filler in polyethylene compounds**

This Part 605 of IEC 60811 describes the test methods for measuring the content of carbon black added for UV stabilization of polyethylene and polyolefin compounds. These methods are not suitable for halogenated compounds. Method A is suitable only for polyethylene and polypropylene compounds. Method B is suitable for polyolefine compounds.

Keel en

Asendab EVS-EN 60811-4-1:2004

**EVS-EN 60811-606:2012**

Hind 7,38

Identne EN 60811-606:2012

ja identne IEC 60811-606:2012

**Electric and optical fibre cables - Test methods for non-metallic materials - Part 606: Physical tests - Methods for determining the density**

This Part 606 of IEC 60811 describes the methods for determining the density for the most common types of insulating and sheathing compounds (cross-linked, PVC, PE, PP, etc.).

Keel en

Asendab EVS-EN 60811-1-3:2001/A1:2002; EVS-EN 60811-1-3:2001

**EVS-EN 60811-607:2012**

Hind 6,47

Identne EN 60811-607:2012

ja identne IEC 60811-607:2012

**Electric and optical fibre cables - Test methods for non-metallic materials - Part 607: Physical tests - Test for the assessment of carbon black dispersion in polyethylene and polypropylene**

This Part 607 of IEC 60811 specifies test methods for carbon black dispersion that are applicable specifically to PE and PP compounds, including cellular compounds and foam skin for insulation.

Keel en

Asendab EVS-EN 60811-4-1:2004

**EVS-EN 60838-2-2:2006/A1:2012**

Hind 4,79

Identne EN 60838-2-2:2006/A1:2012

ja identne IEC 60838-2-2:2006/A1:2012

**Mitmesugused lambipesad. Osa 2-2: Erinõuded. Valgusdiodmoodulite ühenduslülid**

This part of IEC 60838-2 applies to connectors for building-in (including those used for interconnection between LED modules) of miscellaneous types to be used with PCB-based LED modules.

Keel en

**EVS-EN 60898-1:2003/A13:2012**

Hind 5,62

Identne EN 60898-1:2003/A13:2012

**Elektritarvikud. Liigvoolukaitselülitid majapidamis- ja muudele taolistele paigaldistele. Osa 1: Vahelduvvoolu-kaitselülitid**

This part of IEC 60898 applies to a.c. air-break circuit-breakers for operation at 50 Hz or 60 Hz, having a rated voltage not exceeding 440 V (between phases), a rated current not exceeding 125 A and a rated short-circuit capacity not exceeding 25 000 A

Keel en

**EVS-EN 62474:2012**

Hind 18

Identne EN 62474:2012

ja identne IEC 62474:2012

**Material declaration for products of and for the electrotechnical industry**

This International Standard specifies the procedure, content, and form relating to material declarations for products of companies operating in and supplying the electrotechnical industry. Process chemicals and emissions during product use are not in the scope of this International Standard. The main intended use of this International Standard is to provide data to downstream manufacturers that: - allows them to assess products against substance restriction compliance requirements - they can use in their environmentally conscious design process and across all product life cycle phases Clause 4 specifies requirements for a material declaration. Clause 5 specifies the criteria for declarable substances and material classes in the IEC 62474 database associated with this standard. Clause 6 specifies the data format and exchange requirements to be included in the IEC 62474 database. Clause 7 specifies the process to regularly update and maintain the IEC 62474 database. Although this International Standard specifies base requirements, it offers flexibility to product manufacturers and suppliers in the selection of additional requirements or information. This International Standard does not provide any specific method to capture material composition data. Organizations have the flexibility to determine the most appropriate method to capture material composition data without compromising data utility and quality. This International Standard is intended to allow reporting based on engineering judgment, supplier material declarations, or on sampling and testing.

Keel en

**EVS-EN 62561-1:2012**

Hind 12,51

Identne EN 62561-1:2012

ja identne IEC 62561-1:2012

**Lightning Protection System Components (LPSC) - Part 1: Requirements for connection components**

This part of IEC 62561 specifies the requirements and tests for metallic connection components that form part of a lightning protection system (LPS). Typically, these can be connectors, bonding and bridging components, expansion pieces and test joints. Testing of components for an explosive atmosphere is not covered by this standard.

Keel en

Asendab EVS-EN 50164-1:2008

**EVS-EN 62561-2:2012**

Hind 15,4

Identne EN 62561-2:2012

ja identne IEC 62561-2:2012

**Lightning Protection System Components (LPSC) - Part 2: Requirements for conductors and earth electrodes**

This part of IEC 62561 specifies the requirements and tests for: - metallic conductors (other than "natural" conductors) that form part of the air termination system and down conductors; - metallic earth electrodes that form part of the earth termination system.

Keel en

Asendab EVS-EN 50164-2:2008

**EVS-EN 62561-3:2012**

Hind 11,67

Identne EN 62561-3:2012

ja identne IEC 62561-3:2012

**Lightning Protection System Components (LPSC) - Part 3: Requirements for isolating spark gaps**

This part of IEC 62561 specifies the requirements and tests for isolating spark gaps (ISG) for lightning protection systems. ISGs can be used to indirectly bond a lightning protection system to other nearby metalwork where a direct bond is not permissible for functional reasons. Typical applications include the connection to: - earth termination systems of power installations; - earth termination systems of telecommunication systems; - auxiliary earth electrodes of voltage-operated, earth fault circuit breakers; - rail earth electrode of AC and DC railways; - measuring earth electrodes for laboratories; - installations with cathodic protection and stray current systems; - service entry masts for low-voltage overhead cables; - bypassing insulated flanges and insulated couplings of pipelines. This standard does not cover applications where follow currents occur. NOTE Lightning protection system components (LPSC) can also be suitable for use in hazardous conditions such as fire and explosive atmosphere. Due regard will be taken of the extra requirements necessary for the components to be installed in such conditions.

Keel en

Asendab EVS-EN 50164-3:2006; EVS-EN 50164-3:2006/A1:2009

**ASENDATUD VÕI TÜHISTATUD STANDARDID****EVS-EN 50149:2002**

Identne EN 50149:2001+AC:2005

**Raudteealased rakendused. Püsipaigaldised. Elektertransport. Vasest ja vasesulamitest kontaktjuhtmed**

This standard specifies the characteristics of copper and copper alloy wires of cross sections of 80, 100, 107, 120 and 150 mm<sup>2</sup> for use on overhead contact lines. It establishes the product characteristics, the test methods, checking procedures to be used with the wires, together with the ordering and delivery condition.

Keel en

Asendatud EVS-EN 50149:2012

**EVS-EN 50149:2002/AC:2010**

Identne EN 50149:2001

**Raudteealased rakendused. Püsipaigaldised. Elektertransport. Vasest ja vasesulamitest kontaktjuhtmed**

Keel en

Asendatud EVS-EN 50149:2012

**EVS-EN 50149:2002/AC:2011**

Identne EN 50149:2001/AC:2011

**Raudteelased rakendused. Püsipaigaldised. Elektertransport. Vasest ja vasesulamitest kontaktjuhtmed**

Keel en

Asendatud EVS-EN 50149:2012

**EVS-EN 60811-1-2:2001**

Identne EN 60811-1-2:1995

ja identne IEC 811-1-2 + Corr.:1986 + A1:1989

**Elektrikaablite isoleer- ja mantlimaterjalid. Ühtsed katsetusmeetodid. Osa 1: Üldrakendus. Jagu 2: Soojusliku vanandamise meetodid**

This standard specifies the test methods to be used for testing polymeric insulating and sheathing materials of electric cables for power distribution and telecommunications including cables used on ships. This Section Two of Part 1 gives the thermal ageing methods which apply to the most common types of insulating and sheathing compounds (elastomeric, PVC, PE, PP, etc.).

Keel en

Asendatud EVS-EN 60811-100:2012; EVS-EN 60811-401:2012; EVS-EN 60811-412:2012

**EVS-EN 60811-1-3:2001**

Identne EN 60811-1-3:1995

ja identne IEC 811-1-3:1993

**Elektrikaablite isoleer- ja mantlimaterjalid. Ühtsed katsetusmeetodid. Osa 1: Üldrakendus. Jagu 3: Tiheduse kindlaksmääramise meetodid. Veeimavuskatsed. Kahanemiskatse**

This section of IEC 811-1 specifies the test methods to be used for testing polymeric insulating and sheathing materials of electric cables for power distribution and telecommunications including cables used on ships. This section three of part 1 gives the methods for determining the density, water absorption tests and shrinkage test which apply to the most common types of insulating and sheathing compounds (elastomeric, PVC, PE, PP, etc.).

Keel en

Asendatud EVS-EN 60811-606:2012; EVS-EN 60811-100:2012; EVS-EN 60811-502:2012; EVS-EN 60811-402:2012; EVS-EN 60811-503:2012

**EVS-EN 60811-1-4:2001**

Identne EN 60811-1-4:1995

ja identne IEC 811-1-4:1985+Corr.:1986+A1:1993

**Elektriliste ja optiliste kaablite isoleer- ja mantlimaterjalid. Ühtsed katsetusmeetodid. Osa 1: Üldrakendus. Jagu 4: Katse madalal temperatuuril**

This standard specifies the test methods to be used for testing polymeric insulating and sheathing materials of electric cables for power distribution and telecommunications including cables used on ships. This Section Four of Part 1 gives the methods for tests at low temperature which apply to PVC and PE compounds.

Keel en

Asendatud EVS-EN 60811-100:2012; EVS-EN 60811-506:2012; EVS-EN 60811-505:2012; EVS-EN 60811-504:2012

**EVS-EN 60811-3-2:2001**

Identne EN 60811-3-2:1995

ja identne IEC 811-3-2:1985+Corr.:1986+A1:1993

**Elektrikaablite isoleer- ja mantlimaterjalid. Ühtsed katsetusmeetodid. Osa 3: Erimeetodid polüvinüülkloriidühenditele. Jagu 2: Massikaotuskatse. Kuumuskindluskatse**

This Standard specifies the test methods to be used for testing polymeric insulating and sheathing materials of electric cables for power distribution and telecommunications including cables used on ships. This section Two of part 3 gives the methods for loss of mass test and thermal stability test, which apply to PVC compounds.

Keel en

Asendatud EVS-EN 60811-100:2012; EVS-EN 60811-409:2012; EVS-EN 60811-405:2012

**EVS-EN 60811-1-1:2001/A1:2002**

Identne EN 60811-1-1:1995/A1:2001

ja identne IEC 60811-1-1:1993/A1:2001

**Elektrikaablite isoleer- ja mantlimaterjalid. Ühtsed katsetusmeetodid. Osa 1: Üldrakendus. Jagu 1: Paksuse ja üldmõõtmete mõõtmine. Katsetused mehaaniliste omaduste kindlaksmääramiseks**

The International Standard IEC 811-1 specifies the test methods to be used for testing polymeric insulating and sheathing materials of electric cable for power distribution and telecommunications including cables used on ships. This section of IEC 811-1 gives the methods for measuring thicknesses and overall dimensions, and for determining the mechanical properties, which apply to the most common types of insulating and sheathing compounds (elastomeric, PVC, PE, PP etc.).

Keel en

Asendatud EVS-EN 60811-201:2012; EVS-EN 60811-100:2012; EVS-EN 60811-202:2012; EVS-EN 60811-501:2012; EVS-EN 60811-203:2012

**EVS-EN 60811-2-1:2001/A1:2002**

Identne EN 60811-2-1:1998/A1:2001

ja identne IEC 60811-2-1:1998/A1:2001

**Elektriliste ja optiliste kaablite isoleer- ja mantlimaterjalid. Ühtsed katsetusmeetodid. Osa 2-1: Erimeetodid elastomeersetele ühenditele. Osoonikindlus, kuumkövenemise ja mineraalõlisse sukeldamise katsed**

This Standard specifies the test methods to be used for testing polymeric insulating and sheathing materials of electric cables for power distribution and telecommunications including cables used on ships. This Section One of part 2 gives the methods for the ozone resistance test, hot set test and mineral oil immersion test, which apply to elastomeric compounds.

Keel en

Asendatud EVS-EN 60811-100:2012; EVS-EN 60811-403:2012; EVS-EN 60811-507:2012; EVS-EN 60811-404:2012

**EVS-EN 60811-3-1:2001/A2:2002**

Identne EN 60811-3-1:1995/A2:2001  
ja identne IEC 60811-3-1:1985/A2:2001

**Elektrikaablite isoleer- ja mantlimaterjalid. Ühtsed katsetusmeetodid. Osa 3: Erimeetodid polüvinüülkloriidühenditele. Jagu 1: Survekatse kõrgel temperatuuril. Pragunemiskindluse katsed**

This Standard specifies the test methods to be used for testing polymeric insulating and sheathing materials of electric cables for power distribution and telecommunications including cables used on ships. This section One of Part 3 gives the methods for pressure test at high temperature and for tests for resistance to cracking, which apply to PVC compounds.

Keel en

Asendatud EVS-EN 60811-100:2012; EVS-EN 60811-508:2012; EVS-EN 60811-509:2012

**EVS-EN 60811-1-2:2001/A2:2002**

Identne EN 60811-1-2:1995/A2:2000  
ja identne IEC 60811-1-2:1985/A2:2000

**Elektrikaablite isoleer- ja mantlimaterjalid. Ühtsed katsetusmeetodid. Osa 1: Üldrakendus. Jagu 2: Soojusliku vanandamise meetodid**

This standard specifies the test methods to be used for testing polymeric insulating and sheathing materials of electric cables for power distribution and telecommunications including cables used on ships. This Section Two of Part 1 gives the thermal ageing methods which apply to the most common types of insulating and sheathing compounds (elastomeric, PVC, PE, PP, etc.).

Keel en

Asendatud EVS-EN 60811-100:2012; EVS-EN 60811-401:2012; EVS-EN 60811-412:2012

**EVS-EN 60811-1-3:2001/A1:2002**

Identne EN 60811-1-3:1995/A1:2001  
ja identne IEC 60811-1-3:1993/A1:2001

**Elektrikaablite isoleer- ja mantlimaterjalid. Ühtsed katsetusmeetodid. Osa 1: Üldrakendus. Jagu 3: Tiheduse kindlaksmääramise meetodid. Veeimavuskatsed. Kahanemiskatse**

This section of IEC 811-1 specifies the test methods to be used for testing polymeric insulating and sheathing materials of electric cables for power distribution and telecommunications including cables used on ships. This section three of part 1 gives the methods for determining the density, water absorption tests and shrinkage test which apply to the most common types of insulating and sheathing compounds (elastomeric, PVC, PE, PP, etc.).

Keel en

Asendatud EVS-EN 60811-100:2012; EVS-EN 60811-606:2012; EVS-EN 60811-502:2012; EVS-EN 60811-503:2012; EVS-EN 60811-402:2012

**EVS-EN 60811-1-4:2001/A2:2002**

Identne EN 60811-1-4:1995/A2:2001  
ja identne IEC 60811-1-4:1985/A2:2001

**Elektriliste ja optiliste kaablite isoleer- ja mantlimaterjalid. Ühtsed katsetusmeetodid. Osa 1: Üldrakendus. Jagu 4: Katse madalal temperatuuril**

This standard specifies the test methods to be used for testing polymeric insulating and sheathing materials of electric cables for power distribution and telecommunications including cables used on ships. This Section Four of Part 1 gives the methods for tests at low temperature which apply to PVC and PE compounds.

Keel en

Asendatud EVS-EN 60811-100:2012; EVS-EN 60811-506:2012; EVS-EN 60811-505:2012; EVS-EN 60811-504:2012

**EVS-EN 60811-1-1:2001**

Identne EN 60811-1-1:1995  
ja identne IEC 811-1-1:1993

**Elektrikaablite isoleer- ja mantlimaterjalid. Ühtsed katsetusmeetodid. Osa 1: Üldrakendus. Jagu 1: Paksuse ja üldmõõtmete mõõtmine. Katsetused mehaaniliste omaduste kindlaksmääramiseks**

The International Standard IEC 811-1 specifies the test methods to be used for testing polymeric insulating and sheathing materials of electric cable for power distribution and telecommunications including cables used on ships. This section of IEC 811-1 gives the methods for measuring thicknesses and overall dimensions, and for determining the mechanical properties, which apply to the most common types of insulating and sheathing compounds (elastomeric, PVC, PE, PP etc.).

Keel en

Asendatud EVS-EN 60811-201:2012; EVS-EN 60811-100:2012; EVS-EN 60811-202:2012; EVS-EN 60811-501:2012; EVS-EN 60811-203:2012

**EVS-EN 60811-2-1:2001**

Identne EN 60811-2-1:1998  
ja identne IEC 60811-2-1:1998

**Elektriliste ja optiliste kaablite isoleer- ja mantlimaterjalid. Ühtsed katsetusmeetodid. Osa 2-1: Erimeetodid elastomeersetele ühenditele. Osoonikindlus, kuumkövenemise ja mineraalõlisse sukeldamise katsed**

This Standard specifies the test methods to be used for testing polymeric insulating and sheathing materials of electric cables for power distribution and telecommunications including cables used on ships. This Section One of part 2 gives the methods for the ozone resistance test, hot set test and mineral oil immersion test, which apply to elastomeric compounds.

Keel en

Asendatud EVS-EN 60811-100:2012; EVS-EN 60811-403:2012; EVS-EN 60811-507:2012; EVS-EN 60811-404:2012

### **EVS-EN 60811-3-1:2001**

Identne EN 60811-3-1:1995+A1:1996  
ja identne IEC 811-3-1:1985+Corr.:1986+A1:1994

**Elektrikaablite isoleer- ja mantlimaterjalid. Ühtsed katsemeetodid. Osa 3: Erimeetodid polüvinüülkloriidühenditele. Jagu 1: Survekatse kõrgel temperatuuril. Pragunemiskindluse katsed**

This Standard specifies the test methods to be used for testing polymeric insulating and sheathing materials of electric cables for power distribution and telecommunications including cables used on ships. This section One of Part 3 gives the methods for pressure test at high temperature and for tests for resistance to cracking, which apply to PVC compounds.

Keel en

Asendatud EVS-EN 60811-100:2012; EVS-EN 60811-508:2012; EVS-EN 60811-509:2012

### **EVS-EN 60811-4-1:2004**

Identne EN 60811-4-1:2004  
ja identne IEC 60811-4-1:2004

**Elektrikaablite isoleer- ja mantlimaterjalid. Ühtsed katsemeetodid. Osa 4-1: Erimeetodid polüetüleen- ja polüpropüleenühenditele. Keskkonnatoime pragudekindlus. Sulavoolavusindeksi mõõtmine. Tahma ja/või mineraalisisalduse mõõtmine polüetüleenis. Tahmasisalduse mõõtmine termogravimeetrilise analüüsiga. Tahmajaotumise määramine polüetüleenis mikroskoobiga**

Specifies the test methods to be used for testing polymeric insulating and sheathing materials of electric and optical fibre cables for power distribution and telecommunications, including cables used on ships and in offshore applications. These test methods apply specifically to PE and PP compounds, including cellular compounds and foam skin for insulation. The principal changes with respect to the previous edition are listed below: a) the wrapping test after thermal ageing in air is deleted from this part of IEC 60811. It is now given only in IEC 60811-4-2; b) a thermogravimetric method is added for determination of carbon black content; c) a method is introduced for assessment of carbon black dispersion.

Keel en

Asendab EVS-EN 60811-4-1:2001

Asendatud EVS-EN 60811-605:2012; EVS-EN 60811-100:2012; EVS-EN 60811-511:2012; EVS-EN 60811-406:2012; EVS-EN 60811-607:2012

### **EVS-EN 60811-4-2:2005**

Identne EN 60811-4-2:2004  
ja identne IEC 60811-4-2:2004

**Elektrikaablite isoleer- ja mantlimaterjalid. Ühtsed katsemeetodid. Osa 4-2: Erimeetodid polüetüleen- ja polüpropüleenühenditele. Tõmbetugevus ja tõmme katkemisel pärast tingimuste loomist kõrgendatud temperatuuril. Mähkimiskatse pärast tingimuste loomist kõrgendatud temperatuuril. Mähkimiskatse pärast soojusvananemist õhus. Massi suurenemise mõõtmine. Pikaajalise stabiilsuse katse. Vaskkatalüsaatoriga oksüdatiivse degradatsiooni katsemeetod**

Specifies the test methods for testing polymeric insulating and sheathing materials of electric and optical fibre cables for power distribution and communications, including cables used on ships and in offshore applications. These test methods apply specifically to polyolefin insulation and sheath. The principal changes with respect to the previous edition are listed below: a) A measurement of tensile strength is included in Clause 8. b) Clause 10 is now the only method in IEC 60811 for wrapping test after thermal ageing in air. c) Two ageing conditions are now specified for the long-term stability test in Annex A.

Keel en

Asendab EVS-EN 60811-4-2:2001

Asendatud EVS-EN 60811-407:2012; EVS-EN 60811-513:2012; EVS-EN 60811-512:2012; EVS-EN 60811-100:2012; EVS-EN 60811-510:2012; EVS-EN 60811-408:2012; EVS-EN 60811-410:2012

### **EVS-EN 60811-5-1:2001**

Identne EN 60811-5-1:1999  
ja identne IEC 60811-5-1:1990

**Elektrikaablite isoleer- ja mantlimaterjalid. Ühtsed katsemeetodid. Osa 5: Erimeetodid täiteainetele. Jagu 1: Tilktäpp. Õli eraldamine. Rabedus madalamal temperatuuril. Täielik happearv. Korrodeerivate komponentide puudumine. Dielektriline läbitavus temperatuuril 23 °C. Eritakistus alalisvoolul temperatuuril 23 °C ja 100 °C**

This standard specifies the test methods for filling compounds of electric cables used with telecommunication equipment. This section one of part 5 gives the methods for drop-point, separation of oil, lower temperature brittleness, total acid number, absence of corrosive components, permittivity at 23 °C - d.c. resistivity at 23 °C and 100 °C.

Keel en

Asendatud EVS-EN 60811-100:2012; EVS-EN 60811-601:2012; EVS-EN 60811-301:2012; EVS-EN 60811-603:2012; EVS-EN 60811-411:2012; EVS-EN 60811-604:2012; EVS-EN 60811-302:2012; EVS-EN 60811-602:2012

**EVS-EN 60811-3-2:2001/A2:2004**

Identne EN 60811-3-2:1995/A2:2004  
ja identne IEC 60811-3-2:1985/A2:2003

**Elektrikaablite isoleer- ja mantlimaterjalid. Ühtsed katsemeetodid. Osa 3: Erimeetodid polüvinüülkloriidühenditele. Jagu 2: Massikaotuskatse. Kuumuskindluskatse**

This Standard specifies the test methods to be used for testing polymeric insulating and sheathing materials of electric cables for power distribution and telecommunications including cables used on ships. This section Two of part 3 gives the methods for loss of mass test and thermal stability test, which apply to PVC compounds.

Keel en

Asendatud EVS-EN 60811-409:2012; EVS-EN 60811-100:2012; EVS-EN 60811-405:2012

**EVS-EN 60811-5-1:2001/A1:2004**

Identne EN 60811-5-1:1999/A1:2004  
ja identne IEC 60811-5-1:1990/A1:2003

**Elektrikaablite isoleer- ja mantlimaterjalid. Ühtsed katsemeetodid. Osa 5: Erimeetodid täiteainetele. Jagu 1: Tilktäpp. Õli eraldamine. Rabedus madalamal temperatuuril. Täielik happearv. Korrodeerivate komponentide puudumine. Dielektriline läbitavus temperatuuril 23 °C. Eritakistus alalisvoolul temperatuuril 23 °C ja 100 °C**

This standard specifies the test methods for filling compounds of electric cables used with telecommunication equipment. This section one of part 5 gives the methods for drop-point, separation of oil, lower temperature brittleness, total acid number, absence of corrosive components, permittivity at 23 °C - d.c. resistivity at 23 °C and 100 °C.

Keel en

Asendatud EVS-EN 60811-100:2012; EVS-EN 60811-601:2012; EVS-EN 60811-301:2012; EVS-EN 60811-411:2012; EVS-EN 60811-604:2012; EVS-EN 60811-302:2012; EVS-EN 60811-602:2012; EVS-EN 60811-603:2012

**KAVANDITE ARVAMUSKÜSITLUS****EN 55020:2007/FprA1**

Identne EN 55020:2007/FprA1:2012  
ja identne CISPR 20:2006/A1:201X  
Tähtaeg 29.08.2012

**Raadioringhäälingu ja televisioonilevi vastuvõtjad ja kaasseadmed. Häiringukindluse tunnussuurused. Piirväärtused ja mõõtemetodid**

Applies to television broadcast receivers, sound broadcast receivers and associated equipment intended for use in the residential, commercial and light industrial environment. Describes the methods of measurement and specified limits applicable to sound and television receivers and to associated equipment with regard to their immunity characteristics to disturbing signals. This standard is also applicable to the immunity of outdoor units of direct to home (DTH) satellite receiving systems for individual reception. Defines the immunity test requirements for equipment defined in the scope in relation to continuous and transient, conducted and radiated disturbances including electrostatic discharges. Immunity requirements are given in the frequency range 0 Hz to 400 GHz. Test requirements are specified for each port (enclosure or connector) considered.

Keel en

**FprEN 60404-11**

Identne FprEN 60404-11:2012  
ja identne IEC 60404-11:1991 + A1:1998 + A2:2012  
Tähtaeg 29.08.2012

**Magnetic materials - Part 11: Method of test for the determination of surface insulation resistance of magnetic sheet and strip**

This International Standard is intended to define a measurement method for the determination of the characteristics of surface insulation resistance of magnetic sheet and strip. This method is applicable to magnetic sheet and strip insulated on one or both surfaces and is suitable for manufacturing control in the application of insulation coatings.

Keel en

Asendab EVS-EN 10282:2001

**FprEN 60507**

Identne FprEN 60507:2012  
ja identne IEC 60507:201X  
Tähtaeg 29.08.2012

**Artificial pollution tests on high-voltage ceramic and glass insulators to be used on a.c. Systems**

This standard is applicable for the determination of the power frequency withstand characteristics of ceramic and glass insulators to be used outdoors and exposed to polluted atmospheres, on a.c. systems with the highest voltage of the system greater than 1 000 V. These tests are not directly applicable to polymeric insulators, to greased insulators or to special types of insulators (insulators with semiconducting glaze or covered with any organic insulating material). The object of this standard is to prescribe procedures for artificial pollution tests applicable to insulators for overhead lines, substations and traction lines and to bushings. It may also be applied to hollow insulators with suitable precautions to avoid internal flashover. In applying these procedures to apparatus incorporating hollow insulators, the relevant technical committees should consider their effect on any internal equipment and the special precautions which may be necessary.

Keel en

Asendab EVS-EN 60507:2002



**FprEN 60598-1**

Identne FprEN 60598-1:2012  
ja identne IEC 60598-1:201X  
Tähtaeg 29.08.2012

**Valgustid. Osa 1: Üldnõuded ja katsetused**

This Part 1 of International Standard IEC 60598 specifies general requirements for luminaires, incorporating electric light sources for operation from supply voltages up to 1 000 V. The requirements and related tests of this standard cover: classification, marking, mechanical construction and electrical construction. Each section of this Part 1 is read in conjunction with this Section 0 and with other relevant sections to which reference is made. Each part of IEC 60598-2 details requirements for a particular type of luminaire or group of luminaires on supply voltages not exceeding 1 000 V. These parts are published separately for ease of revision and additional sections will be added as and when a need for them is recognized. Attention is drawn to the fact that this Part 1 covers all aspects of safety (electrical, thermal and mechanical). The presentation of photometric data for luminaires is under consideration by the International Commission on Illumination (CIE) and is not, therefore, included in this Part 1.

Keel en

Asendab EVS-EN 60598-1:2008; EVS-EN 60598-1:2008/A11:2009

**FprEN 60598-2-22**

Identne FprEN 60598-2-22:2012  
ja identne IEC 60598-2-22:201X  
Tähtaeg 29.08.2012

**Luminaires - Part 2-22: Particular requirements - Luminaires for emergency lighting**

This section of IEC 60598-2 specifies requirements for emergency lighting luminaires for use with electrical light sources on emergency power supplies not exceeding 1 000 V. This section does not cover the effects of non-emergency voltage reductions on luminaires incorporating high pressure discharge lamps. This section gives general requirements for emergency lighting equipment. The control gear used in emergency luminaires shall comply with the relevant requirements of IEC 61347 Series.

Keel en

Asendab EVS-EN 60598-2-22:2001; EVS-EN 60598-2-22:2001/A1:2003; EVS-EN 60598-2-22:2001/A2:2008; EVS-EN 60598-2-22:2001/AC:2007

**FprEN 61347-2-13**

Identne FprEN 61347-2-13:2012  
ja identne IEC 61347-2-13:201X  
Tähtaeg 29.08.2012

**Lampide juhtimisseadised. Osa 2-13: Erinõuded valgusdiodmoodulite alalis- või vahelduvvoolutoiteliste juhtimisseadistele**

This part of IEC 61347 specifies particular safety requirements for electronic controlgear for use on d.c. supplies up to 250 V and a.c. supplies up to 1 000 V at 50 Hz or 60 Hz and at an output frequency which can deviate from the supply frequency, associated with LED modules. Controlgear for LED modules specified in this standard are designed to provide constant voltage or current at SELV or higher voltages. Deviations from the pure voltage and current types do not exclude the gear from this standard. The annexes of IEC 61347-1 which are applicable according to this Part 2-13 and using the word "lamp" are understood to also comprise LED modules. Particular requirements for SELV controlgear are given in Annex I. Performance requirements will be covered by IEC 62384. Plug-in controlgear, being part of the luminaire, are covered as for built-in controlgear by the additional requirements of the luminaire standard.

Keel en

Asendab EVS-EN 61347-2-13:2006; EVS-EN 61347-2-13:2006/AC:2011

**FprEN 61951-1**

Identne FprEN 61951-1:2012  
ja identne IEC 61951-1:201X  
Tähtaeg 29.08.2012

**Sekundaarelemendid ja -patareid, mis sisaldavad leeliselisi või teisi mittehappelisi elektrolüüte. Kantavad suletud taaslaetavad üksikelemendid. Osa 1: Nikkel-kaadmium**

This part of IEC 61951 specifies marking, designation, dimensions, tests and requirements for portable sealed nickel-cadmium small prismatic, cylindrical and button rechargeable single cells, suitable for use in any orientation.

Keel en

Asendab EVS-EN 61951-1:2003+A1:2006

## FprEN 62271-201

Identne FprEN 62271-201:2012  
ja identne IEC 62271-201:201X  
Tähtaeg 29.08.2012

### **High-voltage switchgear and controlgear - Part 201: AC solid-insulated enclosed switchgear and controlgear for rated voltages above 1 kV and up to and including 52 kV**

This part of IEC 62271 specifies requirements for prefabricated solid-insulation enclosed switchgear and controlgear for alternating current of rated voltages above 1 kV and up to and including 52 kV for indoor installation and for service frequencies up to and including 60 Hz. Access to the switchgear and controlgear is restricted to authorized personnel. NOTE 1 For the use of this document high-voltage (IEC 60050-601:1985, 601-01-27) is the rated voltage above 1 000 V. However, medium voltage (IEC 60050-601:1985, 601-01-28) is commonly used for distribution systems with voltages above 1 kV and generally applied up to and including 52 kV; refer to [1] of Bibliography. NOTE 2 Although primarily dedicated to three-phase systems, this standard can also be applied to single-phase or two-phase systems. Enclosures may include fixed and removable components and may be filled with fluid (liquid or gas) to provide an extra insulation. For switchgear and controlgear containing gas-filled compartments, the design pressure is limited to a maximum of 300 kPa (relative pressure). Solid-insulation enclosed switchgear and controlgear complying with this standard can be touched when energised. Solid-insulation enclosed switchgear and controlgear for special use, for example, in flammable atmospheres, in mines or on board ships, may be subject to additional requirements. Components contained in solid-insulation enclosed switchgear and controlgear are to be designed and tested in accordance with their various relevant standards. This standard supplements the standards for the individual components regarding their installation in switchgear and controlgear assemblies. This standard does not preclude that other equipment may be included in the same enclosure. In such a case, any possible influence of that equipment on the switchgear and controlgear should be taken into account. NOTE 3 Switchgear and controlgear assemblies having a metal enclosure are covered by IEC 62271-200 refer to [2] of Bibliography.

Keel en

Asendab EVS-EN 62271-201:2006; EVS-EN 62271-201:2006/AC:2006

## **HD 60364-7-705:2007/FprA11**

Identne HD 60364-7-705:2007/FprA11:2012  
Tähtaeg 29.08.2012

### **Madalpingelised elektripaigaldised. Osa 7-705: Nõuded eripaigaldistele ja -paikadele. Põllundus- ja aiandusehitised**

The requirements of this part of HD 60364 apply to fixed electrical installations inside and outdoors of agricultural and horticultural premises. Some of the requirements are also applicable to other locations that are in common buildings belonging to the agricultural and horticultural premises. Rooms, locations and areas for household applications and similar are not covered by this standard. If some of the special requirements of Part 7-705 are also applicable for residences and other locations in such common buildings this is stated in the normative text.

Keel en

## 31 ELEKTROONIKA

### **UUED STANDARDID JA PUBLIKATSIOONID**

#### **EVS-EN 60838-2-2:2006/A1:2012**

Hind 4,79

Identne EN 60838-2-2:2006/A1:2012

ja identne IEC 60838-2-2:2006/A1:2012

#### **Mitmesugused lambipesad. Osa 2-2: Erinõuded. Valgusdiodmoodulite ühenduslülid**

This part of IEC 60838-2 applies to connectors for building-in (including those used for interconnection between LED modules) of miscellaneous types to be used with PCB-based LED modules.

Keel en

#### **EVS-EN 62474:2012**

Hind 18

Identne EN 62474:2012

ja identne IEC 62474:2012

#### **Material declaration for products of and for the electrotechnical industry**

This International Standard specifies the procedure, content, and form relating to material declarations for products of companies operating in and supplying the electrotechnical industry. Process chemicals and emissions during product use are not in the scope of this International Standard. The main intended use of this International Standard is to provide data to downstream manufacturers that: - allows them to assess products against substance restriction compliance requirements - they can use in their environmentally conscious design process and across all product life cycle phases Clause 4 specifies requirements for a material declaration. Clause 5 specifies the criteria for declarable substances and material classes in the IEC 62474 database associated with this standard. Clause 6 specifies the data format and exchange requirements to be included in the IEC 62474 database. Clause 7 specifies the process to regularly update and maintain the IEC 62474 database. Although this International Standard specifies base requirements, it offers flexibility to product manufacturers and suppliers in the selection of additional requirements or information. This International Standard does not provide any specific method to capture material composition data. Organizations have the flexibility to determine the most appropriate method to capture material composition data without compromising data utility and quality. This International Standard is intended to allow reporting based on engineering judgment, supplier material declarations, or on sampling and testing.

Keel en

## **KAVANDITE ARVAMUSKÜSITLUS**

### **EN 61190-1-2:2007/FprA1**

Identne EN 61190-1-2:2007/FprA1:2012

ja identne IEC 61190-1-2:2007/A1:201X

Tähtaeg 29.08.2012

#### **Attachment materials for electronic assembly - Part 1-2: Requirements for soldering pastes for high-quality interconnects in electronics assembly**

This part of IEC 61190 specifies general requirements for the characterization and testing of solder pastes used to make high-quality electronic interconnections in electronics assembly. This standard serves as a quality control document and is not intended to relate directly to the material's performance in the manufacturing process. Related information on flux characterization, quality control and procurement documentation for solder flux and flux containing material may be found in IEC 61190-1-1.

Keel en

### **FprEN 55035**

Identne FprEN 55035:2012

ja identne CISPR 35:201X

Tähtaeg 29.08.2012

#### **Electromagnetic compatibility of multimedia equipment - Immunity requirements**

NOTE Blue coloured text within this document indicates text aligned with CISPR 32. This CISPR publication applies to multimedia equipment (MME) as defined in clause 3.1.23 and having a rated ACrms or DC supply voltage not exceeding 600 V. Equipment within the scope of CISPR 20 or CISPR 24 is within the scope of this publication. After market automotive products do not fall within the scope of this publication. MME intended primarily for professional use is within the scope of this publication. The immunity requirements in this publication are not intended to be applicable to the intentional transmissions from a radio transmitter as defined by the ITU. Equipment, for which immunity requirements in the frequency range covered by this publication are explicitly formulated in other CISPR publications (except CISPR 20 and CISPR 24), are excluded from the scope of this publication. The objectives of this publication are: 1. to establish requirements which provide an adequate level of intrinsic immunity so that the MME will operate as intended in its environment in the frequency range 0 Hz to 400 GHz; 2. to specify procedures to ensure the reproducibility of tests and the repeatability of results. Due to technology convergence of the functions of MME, the performance criteria have been 216 determined on a function-orientated basis rather than an equipment-orientated basis

Keel en

### **FprEN 60393-2**

Identne FprEN 60393-2:2012

ja identne IEC 60393-2:201X

Tähtaeg 29.08.2012

#### **Potentiometers for use in electronic equipment - Part 2: Sectional specification: lead-screw actuated and rotary preset potentiometers**

This standard is applicable to lead-screw actuated and rotary preset potentiometers, wirewound and non-wirewound for use in electronic equipment. These potentiometers are primarily intended for use in circuits for trimming purposes which require infrequent adjustments.

Keel en

### **FprEN 60393-5**

Identne FprEN 60393-5:2012

ja identne IEC 60393-5:201X

Tähtaeg 29.08.2012

#### **Potentiometers for use in electronic equipment - Part 5: Sectional specification: single-turn rotary low-power wirewound and nonwirewound potentiometers**

This standard is applicable to single-turn rotary low-power wirewound and non-wirewound potentiometers, with a rated dissipation less than to 10 W. These potentiometers are primarily intended for use in electronic equipment.

Keel en

### **FprEN 60393-6**

Identne FprEN 60393-6:2012

ja identne IEC 60393-6:201X

Tähtaeg 29.08.2012

#### **Potentiometers for use in electronic equipment - Part 6: Sectional specification: Surface mount preset potentiometers**

This standard is applicable to surface mount preset potentiometers for use in electronic equipment.

Keel en

### **FprEN 62442-3**

Identne FprEN 62442-3:2012

ja identne IEC 62442-3:201X

Tähtaeg 29.08.2012

#### **Energy performance of lamp controlgear - Part 3: Controlgear for halogen lamps and LED modules - Method of measurement to determine the efficiency of the controlgear**

This International Standard defines a measurement method of the power losses of magnetic transformer and the power losses with the standby power of electronic convertor for halogen lamps and LED modules. The load for the test measurement method of magnetic transformer and electronic convertor is specified at the rated supply current with substitution load resistor. Also a calculation method of the efficiency for the mentioned controlgear for halogen lamps and LED modules is defined. This International Standard applies to electrical controlgear – lamp circuits comprised solely of the controlgear and of the lamp(s). NOTE 1: Requirements for testing individual controlgear during production are not included. NOTE 2: For multipurpose power supplies only the lighting part may be considered. It specifies the measurement method for the total input power, the standby power and the calculation method of the controlgear efficiency for all controlgear sold for domestic and normal commercial purposes operating with halogen lamps and LED modules. This International Standard does not apply to: - controlgear which form an integral part of lamps; - controlgear circuits with capacitors connected in series; - controllable wire-wound magnetic controlgear;

Keel en

**FprEN 62595-2**

Identne FprEN 62595-2:2012  
ja identne IEC 62595-2:201X  
Tähtaeg 29.08.2012

**LCD backlight unit - Part 2: Electro-optical measurement methods of LED backlight unit for liquid crystal displays**

This part of IEC 62595 series specifies the standard measurement conditions and measuring methods for determining electrical, optical, and electro-optical parameters of LED backlight units for liquid crystal displays.

Keel en

**FprEN 62595-1-1**

Identne FprEN 62595-1-1:2012  
ja identne IEC 62595-1-1:201X  
Tähtaeg 29.08.2012

**LCD Backlight Unit - Part 1-1: Generic specification**

This document is a generic specification for backlight unit for liquid crystal displays. It defines general procedures for quality assessment to be used in the IECQ system and gives general rules for measuring methods of electrical and optical characteristics, rules for climatic and mechanical tests, and rules for endurance tests.

Keel EN

**FprEN 62629-1-2**

Identne FprEN 62629-1-2:2012  
ja identne IEC 62629-1-2:201X  
Tähtaeg 29.08.2012

**3D Display devices - Part 1-2: Generic - Terminology and letter symbols**

This document provides a list of the terminologies that are frequently used in describing 3D display technologies in IEC 62629 series. Terms for various 3D display technologies on stereoscopic, autostereoscopic, volumetric, and holographic displays are included.

Keel en

**FprEN 62676-1-1**

Identne FprEN 62676-1-1:2012  
ja identne IEC 62676-1-1:201X  
Tähtaeg 29.08.2012

**Video surveillance systems for use in security applications - Part 1-1: Video system requirements**

This IEC Standard specifies the minimum requirements and gives recommendations for VSS Systems installed for security applications. This Standard specifies the minimum performance requirements and functional requirements to be agreed on between customer, law-enforcement where applicable and supplier in the operational requirement, but does not include requirements for design, planning, installation, testing, operation or maintenance. This standard excludes installation of remotely monitored detector activated VSS systems. This IEC Standard also applies to VSS Systems sharing means of detection, triggering, interconnection, control, communication and power supplies with other applications. The operation of a VSS System shall not be adversely influenced by other applications. Requirements are specified for VSS components where the relevant environment is classified. This classification describes the environment in which the VSS component may be expected to operate as designed. When the requirements of the four environmental classes are inadequate, due to the extreme conditions experienced in certain geographic locations, special national conditions may be applied.

Keel en

## **FprEN 62676-1-2**

Identne FprEN 62676-1-2:2012  
ja identne IEC 62676-1-2:201X  
Tähtaeg 29.08.2012

### **Video surveillance systems for use in security applications - Part 1-2: Video transmission – General video transmission - requirements**

This section of the standard shall introduce general requirements on video transmission. With IEC 62676-3 a detailed specification on analog video transmission over different media including signal and performance requirements is already defined. For the growing number of surveillance applications based on IP video transmission the requirements are defined in 2 standards: This standard covers the general requirements for video transmissions on performance, security and conformance to basic IP connectivity, based on available, well-known, international standards. In areas where more detailed IP requirements are necessary additional specifications are given, in order to reach compatibility. In this standard no detailed and special VSS protocols are defined. In part -2 of this standard series a detailed video IP protocol, messages and commands on top of the general connectivity and performance requirements of this subpart -1 are defined. Part -2 defines an IP protocol for full interoperability (e.g. PTZ control, eventing, etc.) of video transmission devices used in surveillance applications. The first section of this standard defines the minimum performance requirements on video transmission for security applications in IP networks. In surveillance applications the requirements on timing, quality and availability are strict and defined in the last section of this standard. Guidelines for network architecture are given, how these requirements can be fulfilled. The second section of this standard defines requirements on basic IP connectivity of video transmission devices to be used in security applications. If a video transmission device shall be used in security, certain basic requirements apply: First of all a basic understanding of IP connectivity needs to be introduced which requests the device to be compliant to fundamental network protocols. These could be requirements which may be applied to all IP security devices even beyond IP video. For this reason requirements are introduced in a second step for compliance to basic streaming protocols, used in this standard for video streaming and stream control. Since security applications need high availability and reliability, general means for the transmission of the video status and health check events have to be covered. These are defined in general requirements on eventing and network device management. In security proper maintenance and setup is essential for the functioning of the video transmission device: Locating streaming devices and their capabilities is a basic requirement and covered in 'device discovery and description'.

Keel en

## **33 SIDETEHNIKA**

### **UUED STANDARDID JA PUBLIKATSIOONID**

#### **EVS-EN 55103-2:2009/IS1:2012**

Hind 0  
Identne EN 55103-2:2009/IS1:2012

#### **Elektromagnetiline ühilduvus. Professionaalseks kasutamiseks mõeldud audio-, video- ning audiovisuaalsüsteemide ja etendusvalgustuse juhtseadmete tooteperekonna standard. Osa 2: Häiringukindlus**

Keel en

## **EVS-EN 62149-7:2012**

Hind 14,69  
Identne EN 62149-7:2012  
ja identne IEC 62149-7:2012

### **Fibre optic active components and devices - Performance standards - Part 7: 1 310 nm discrete vertical cavity surface emitting laser devices**

This part of IEC 62149 covers the performance specification for 1 310-nm discrete vertical cavity surface emitting laser (VCSEL) devices of transverse single-mode and multimode types used for the fibre optic telecommunication and optical data transmission application in a form of the VCSEL chips mounted on a substrate with wire bonding to their chips' anode and cathode terminals without any fibre pigtailed. The performance standard contains a definition of the product performance requirements together with a series of sets of tests and measurements with clearly defined conditions, severities, and pass/fail criteria. The tests are intended to be run on a "one-off" basis to prove any product's ability to satisfy the performance standard's requirements. A product that has been shown to meet all the requirements of a performance standard can be declared as complying with the performance standard, but should then be controlled by a quality assurance/quality conformance program.

Keel en

### **KAVANDITE ARVAMUSKÜSITLUS**

#### **EN 55016-4-2:2011/FprA1**

Identne EN 55016-4-2:2011/FprA1:2012  
ja identne CISPR 16-4-2:2011/A1:201X  
Tähtaeg 29.08.2012

#### **Specification for radio disturbance and immunity measuring apparatus and methods - Part 4-2: Uncertainties, statistics and limit modelling - Measurement instrumentation uncertainty**

This part of CISPR 16-4 specifies the method of applying Measurement Instrumentation Uncertainty (MIU) when determining compliance with CISPR disturbance limits. The material is also relevant to any EMC test when interpretation of the results and conclusions reached will be impacted by the uncertainty of the measurement instrumentation used during testing.

Keel en

**EN 55020:2007/FprA1**

Identne EN 55020:2007/FprA1:2012  
ja identne CISPR 20:2006/A1:201X  
Tähtaeg 29.08.2012

**Raadioringhäälingu ja televisioonilevi vastuvõtjad ja kaasseadmed. Häiringukindluse tunnussuurused. Piirväärtused ja mõõtemetodid**

Applies to television broadcast receivers, sound broadcast receivers and associated equipment intended for use in the residential, commercial and light industrial environment. Describes the methods of measurement and specified limits applicable to sound and television receivers and to associated equipment with regard to their immunity characteristics to disturbing signals. This standard is also applicable to the immunity of outdoor units of direct to home (DTH) satellite receiving systems for individual reception. Defines the immunity test requirements for equipment defined in the scope in relation to continuous and transient, conducted and radiated disturbances including electrostatic discharges. Immunity requirements are given in the frequency range 0 Hz to 400 GHz. Test requirements are specified for each port (enclosure or connector) considered.

Keel en

**EN 55103-1:2009/FprAA**

Identne EN 55103-1:2009/FprAA:2012  
Tähtaeg 29.08.2012

**Elektromagnetiline ühilduvus. Professionaalseks kasutamiseks mõeldud audio-, video- ning audiovisuaalsüsteemide ja etendusvalgustuse juhtseadmete tooteperekonna standard. Osa 1: Emissioon**

This European Standard for EMC emission requirements applies to professional audio, video, audio-visual and entertainment lighting control apparatus as defined in 3.6 intended for use in the environments described in Clause 4. This includes the digital apparatus defined in 3.5 and sub-assemblies, see 6.3. Disturbances in the frequency range 0 Hz to 400 GHz are covered, but requirements are not set over the whole of that range. See Note 5.

Keel en

**EN 61883-6:2005/FprA1**

Identne EN 61883-6:2005/FprA1:2012  
ja identne IEC 61883-6:2005/A1:201X  
Tähtaeg 29.08.2012

**Consumer audio/video equipment - Digital interface - Part 6: Audio and music data transmission protocol**

This stanard describes a protocol for the transmission of audio and music data employing IEEE 1394 and specifies essential requirements for the application of the protocol. This protocol can be applied to all modules or devices that have any kind of audio and/or music data processing, generation and conversion function blocks.

Keel en

**FprEN 60794-2-20**

Identne FprEN 60794-2-20:2012  
ja identne IEC 60794-2-20:201X  
Tähtaeg 29.08.2012

**Optical fibre cables - Part 2-20: Indoor cables - Family specification for multi-fibre optical cables**

This part of IEC 60794 is a family specification covering multi-fibre optical cables for indoor use. The requirements of the sectional specification IEC 60794-2 are applicable to cables covered by this standard. Annex B contains a Blank Detail Specification and general guidance in case the cables are intended to be used in installation governed by the MICE table of ISO/IEC 24702 (Industrial premises)

Keel en

Asendab EVS-EN 60794-2-20:2010

**FprEN 61000-4-6**

Identne FprEN 61000-4-6:2012  
ja identne IEC 61000-4-6:201X  
Tähtaeg 29.08.2012

**Electromagnetic compatibility (EMC) - Part 4-6: Testing and measurement techniques - Conducted disturbances, induced by radio-frequency fields immunity test**

This part of IEC 61000 relates to the conducted immunity requirements of electrical and 232 electronic equipment to electromagnetic disturbances coming from intended radio-frequency 233 (RF) transmitters in the frequency range 150 kHz up to 80 MHz. Equipment not having at least 234 one conducting cable (such as mains supply, signal line or earth connection) which can 235 couple the equipment to the disturbing RF fields is excluded. 236 NOTE 1 Test methods are defined in this part for measuring the effect that conducted disturbing signals, induced 237 by electromagnetic radiation, have on the equipment concerned. The simulation and measurement of these 238 conducted disturbances are not adequately exact for the quantitative determination of effects. The test methods 239 defined are structured for the primary objective of establishing adequate repeatability of results at various facilities 240 for quantitative analysis of effects. 241 The object of this standard is to establish a common reference for evaluating the functional 242 immunity of electrical and electronic equipment when subjected to conducted disturbances 243 induced by radio-frequency fields. The test method documented in this part of IEC 61000 244 describes a consistent method to assess the immunity of an equipment or system against a 245 defined phenomenon.

Keel en

Asendab EVS-EN 61000-4-6:2009

## **FprEN 61300-3-50**

Identne FprEN 61300-3-50:2012

ja identne IEC 61300-3-50:2010

Tähtaeg 29.08.2012

### **Fibre optic interconnecting devices and passive components - Basic test and measurement procedures - Part 3-50: Examinations and measurements - Crosstalk for optical spatial switches**

This part of IEC 61300 describes the procedure to measure the crosstalk of optical signals between the ports of a multiport MxN (M input ports and N output ports) fibre optic spatial switch. The crosstalk is defined as the ratio of the optical power at an output port which comes from the unconnected input port, to the optical power at the output power which comes from the connected input port.

Keel en

## **FprEN 61753-089-2**

Identne FprEN 61753-089-2:2012

ja identne IEC 61753-089-2:201X

Tähtaeg 29.08.2012

### **Fibre optic interconnecting devices and passive components - Performance standard - Part 089-2: Non-connectorised single-mode bidirectional OTDR monitoring WDM devices for Category C - Controlled environment**

This part of IEC 61753 contains the minimum initial performance, test and measurement requirements and severities which a fibre optic pigtailed wide wavelength division multiplexing (WDM) device for monitoring passive optical networks (PON) using an optical time-domain reflectometer (OTDR) satisfies in order to be categorized as meeting the requirements of category C (controlled environments), as defined in annex A of IEC 61753-1. Annex B of this standard provides information concerning the principle and function of the OTDR monitoring WDM.

Keel en

## **FprEN 62074-1**

Identne FprEN 62074-1:2012

ja identne IEC 62074-1:201X

Tähtaeg 29.08.2012

### **Fibre optic interconnecting devices and passive components - Fibre optic WDM devices - Part 1: Generic specification**

This part of IEC 62074 applies to fibre optic wavelength division multiplexing (WDM) devices. These have all of the following general features: - They are passive, in that they contain no optoelectronic or other transducing elements; however they may use temperature control only to stabilize the device characteristics; they exclude any optical switching functions; - They have three or more ports for the entry and/or exit of optical power, and share optical power among these ports in a predetermined fashion depending on the wavelength; - The ports are optical fibres, or optical fibre connectors. This standard establishes uniform requirements for the following: - Optical, mechanical and environmental properties;

Keel en

Asendab EVS-EN 62074-1:2009

## **35 INFOTEHNOLOOGIA. KONTORISEADMED**

### **UUED STANDARDID JA PUBLIKATSIOONID**

#### **CEN/TS 15480-2:2012**

Hind 26,5

Identne CEN/TS 15480-2:2012

#### **Identification card systems - European Citizen Card - Part 2: Logical data structures and security services**

This Technical Specification specifies the logical characteristics and security features at the card/system interface for the European Citizen Card. The European Citizen Card is a smart card with Identification, Authentication and electronic Signature (IAS) services. Therefore: - the supported services are specified; - the supported data structures as well as the access to these structures are specified; - the command set is defined. This Technical Specification aims to ensure the interoperability at card/system interface in the usage phase. In order to reach the interoperability objective, IAS services are compliant with EN 14890 Part 1 and Part 2. As the EN documents offer options, this specification fully defines a complete profile. This Technical Specification also considers ICAO Doc 9303. This Technical Specification does not mandate the use of a particular technology, and is intended to allow both native and Java card technologies. This specification encompasses mandatory and optional features. Optional features make up a toolbox of modular options from which issuers can pick up the necessary protocols to fulfil the requirements for use. Mandatory features shall be implemented for a smart card to be compliant with this Technical Specification. Mandatory features required for compliance to ECC specification are given in Annex C, the optional features are given in Annex D. Two IAS-enabled smart cards issued by two different issuers, and compliant with this Technical Specification but implementing different application profiles out of this Technical Specification, can interoperate with a terminal provided that such a terminal supports both application profiles. Therefore, interoperability requires a specific agreement between issuers/governments in order to determine which cross-border services are to be shared, and consequently, which protocols are to be supported by the terminals in each country. All the APDU commands described in this Technical Specification are in accordance with ISO/IEC 7816 Part 4 or Part 8. They are fully described here in order to provide the settings adopted by this specification and to prevent any ambiguity in case of several possible interpretations of the standards. For physical, electrical and transport protocol characteristics, refer to CEN/TS 15480-1.

Keel en

Asendab CEN/TS 15480-2:2007

**CEN/TS 16316:2012**

Hind 13,92

Identne CEN/TS 16316:2012

**Postal services - Open interface - Sortplan**

This Technical Specification specifies the sort plan file content and structure. It does not deal with other configuration files in sorting machines nor is it applicable to the transport mechanism. The content of a sort plan allows the specification of the following capabilities: - sorting by address and non-address attributes; - sorting of code ranges; - sorting of rejects; - support of display and label texts; - dynamic outlet groups; - sorting to more than one outlet; - overflow handling; - support of cut off time before dispatch; - sequence sorting; - provide volume information (option); - support of Cards; - possibility to add simple manufacturer specific information; - support of various sort code formats and non-address attributes; - support of various display and label formats; - check against characteristics of the sorting machine.

Keel en

**EVS-EN 61158-4-2:2012**

Hind 33,25

Identne EN 61158-4-2:2012

ja identne IEC 61158-4-2:2010

**Industrial communication networks - Fieldbus specifications - Part 4-2: Data-link layer protocol specification - Type 2 elements**

The data-link layer provides basic time-critical messaging communications between devices in an automation environment. This protocol provides communication opportunities to all participating data-link entities, sequentially and in a cyclic synchronous manner. Foreground scheduled access is available for time-critical activities together with background unscheduled access for less critical activities. Deterministic and synchronized transfers can be provided at cyclic intervals up to 1 ms and device separations of 25 km. This performance is adjustable dynamically and on-line by reconfiguring the parameters of the local link whilst normal operation continues. By similar means, DL connections and new devices may be added or removed during normal operation. This protocol provides means to maintain clock synchronization across an extended link with a precision better than 10  $\mu$ s. This protocol optimizes each access opportunity by concatenating multiple DLSDUs and associated DLPCI into a single DLPDU, thereby improving data transfer efficiency for datalink entities that actively source multiple streams of data. The maximum system size is an unlimited number of links of 99 nodes, each with 255 DLSAPaddresses. Each link has a maximum of 224 related peer and publisher DLCEPs.

Keel en

Asendab EVS-EN 61158-4-2:2008

**EVS-EN 61158-4-3:2012**

Hind 26,5

Identne EN 61158-4-3:2012

ja identne IEC 61158-4-3:2010

**Industrial communication networks - Fieldbus specifications - Part 4-3: Data-link layer protocol specification - Type 3 elements**

The data-link layer provides basic time-critical messaging communications between devices in an automation environment. This protocol provides communication opportunities to a pre-selected "master" subset of datalink entities in a cyclic asynchronous manner, sequentially to each of those data-link entities. Other data-link entities communicate only as permitted and delegated by those master datalink entities. For a given master, its communications with other data-link entities can be cyclic, or acyclic with prioritized access, or a combination of the two. This protocol provides a means of sharing the available communication resources in a fair manner. There are provisions for time synchronization and for isochronous operation.

Keel en

Asendab EVS-EN 61158-4-3:2008

**EVS-EN 61158-5-2:2012**

Hind 27,7

Identne EN 61158-5-2:2012

ja identne IEC 61158-5-2:2010

**Industrial communication networks - Fieldbus specifications - Part 5-2: Application layer service definition - Type 2 elements**

The fieldbus application layer (FAL) provides user programs with a means to access the fieldbus communication environment. In this respect, the FAL can be viewed as a "window between corresponding application programs." This standard provides common elements for basic time-critical and non-time-critical messaging communications between application programs in an automation environment and material specific to Type 2 fieldbus. The term "time-critical" is used to represent the presence of a time-window, within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant and possibly human life. This standard defines in an abstract way the externally visible service provided by the Type 2 fieldbus application layer in terms of a) an abstract model for defining application resources (objects) capable of being manipulated by users via the use of the FAL service, b) the primitive actions and events of the service; c) the parameters associated with each primitive action and event, and the form which they take; and d) the interrelationship between these actions and events, and their valid sequences. The purpose of this standard is to define the services provided to a) the FAL user at the boundary between the user and the application layer of the fieldbus reference model, and b) Systems Management at the boundary between the application layer and Systems Management of the fieldbus reference model

Keel en

Asendab EVS-EN 61158-5-2:2008



**EVS-EN 61158-5-3:2012**

Hind 39,3

Identne EN 61158-5-3:2012

ja identne IEC 61158-5-3:2010

**Industrial communication networks - Fieldbus specifications - Part 5-3: Application layer service definition - Type 3 elements**

This standard is one of a series produced to facilitate the interconnection of automation system components. It is related to other standards in the set as defined by the "three-layer" fieldbus reference model described in IEC/TR 61158-1. This sub-part contains material specific to Type 3 fieldbus.

Keel en

Asendab EVS-EN 61158-5-3:2008

**EVS-EN 61158-3-12:2012**

Hind 16,1

Identne EN 61158-3-12:2012

ja identne IEC 61158-3-12:2010

**Industrial communication networks - Fieldbus specifications - Part 3-12: Data-link layer service definition - Type 12 elements**

This part of IEC 61158 provides common elements for basic time-critical messaging communications between devices in an automation environment. The term "time-critical" is used to represent the presence of a time-window, within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant and possibly human life. This standard defines in an abstract way the externally visible service provided by the Type 12 fieldbus data-link layer in terms of a) the primitive actions and events of the service; b) the parameters associated with each primitive action and event, and the form which they take; c) the interrelationship between these actions and events, and their valid sequences. The purpose of this standard is to define the services provided to - the Type 12 fieldbus application layer at the boundary between the application and data-link layers of the fieldbus reference model; - systems management at the boundary between the data-link layer and systems management of the fieldbus reference model.

Keel en

Asendab EVS-EN 61158-3-12:2008

**EVS-EN 61158-3-14:2012**

Hind 11,67

Identne EN 61158-3-14:2012

ja identne IEC 61158-3-14:2010

**Industrial communication networks - Fieldbus specifications - Part 3-14: Data-link layer service definition - Type 14 elements**

This part of IEC 61158 provides common elements for basic time-critical messaging communications between devices in an automation environment. The term "time-critical" is used to represent the presence of a time-window, within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant and possibly human life. This standard defines in an abstract way the externally visible service provided by the Type 14 fieldbus data-link layer in terms of a) the primitive actions and events of the service; b) the parameters associated with each primitive action and event, and the form which they take; and c) the interrelationship between these actions and events, and their valid sequences. The purpose of this standard is to define the services provided to - the Type 14 fieldbus application layer at the boundary between the application and datalink layers of the fieldbus reference model, and - systems management at the boundary between the data-link layer and systems management of the fieldbus reference model.

Keel en

Asendab EVS-EN 61158-3-14:2008

**EVS-EN 61158-3-21:2012**

Hind 16,1

Identne EN 61158-3-21:2012

ja identne IEC 61158-3-21:2010

**Industrial communication networks - Fieldbus specifications - Part 3-21: Data-link layer service definition - Type 21 elements**

This part of IEC 61158 provides the common elements for basic time-critical messaging communications between devices in an automation environment. The term "time-critical" in this context means the prioritized full-duplex collision-free time-deterministic communication, of which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the required time risks the failure of the applications requesting the actions, with attendant risk to equipment, plant, and possibly human life. This standard defines in an abstract way the externally visible service provided by the Type 21 data-link layer in terms of: a) the primitive actions and events of the service; b) the parameters associated with each primitive action and event, and the form that they take; and c) the interrelationships between these actions and events, and their valid sequences. The purpose of this standard is to define the services provided to: - The Type 21 application layer at the boundary between the application and DLLs of the fieldbus reference model; - Systems management at the boundary between the DLL and the systems management of the fieldbus reference model.

Keel en

**EVS-EN 61158-3-22:2012**

Hind 14,69

Identne EN 61158-3-22:2012

ja identne IEC 61158-3-22:2010

**Industrial communication networks - Fieldbus specifications - Part 3-22: Data-link layer service definition - Type 22 elements**

This part of IEC 61158 provides common elements for basic time-critical messaging communications between devices in an automation environment. The term "time-critical" is used to represent the presence of a time-window, within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant and possibly human life. This standard defines in an abstract way the externally visible service provided by the Type 22 fieldbus data-link layer in terms of: a) the primitive actions and events of the service; b) the parameters associated with each primitive action and event, and the form which they take; and c) the interrelationship between these actions and events, and their valid sequences. The purpose of this standard is to define the services provided to: - the Type 22 fieldbus application layer at the boundary between the application and datalink layers of the fieldbus reference model; and - systems management at the boundary between the data-link layer and systems management of the fieldbus reference model.

Keel en

**EVS-EN 61158-4-11:2012**

Hind 25,03

Identne EN 61158-4-11:2012

ja identne IEC 61158-4-11:2010

**Industrial communication networks - Fieldbus specifications - Part 4-11: Data-link layer protocol specification - Type 11 elements**

The data-link layer provides basic time-critical messaging communications between devices in an automation environment. This protocol provides communication opportunities to all participating data-link entities a) in a synchronously-starting cyclic manner, according to a pre-established schedule, and b) in a cyclic or acyclic asynchronous manner, as requested each cycle by each of those data-link entities. Thus this protocol can be characterized as one which provides cyclic and acyclic access asynchronously but with a synchronous restart of each cycle.

Keel en

Asendab EVS-EN 61158-4-11:2008

**EVS-EN 61158-4-12:2012**

Hind 25,03

Identne EN 61158-4-12:2012

ja identne IEC 61158-4-12:2010

**Industrial communication networks - Fieldbus specifications - Part 4-12: Data-link layer protocol specification - Type 12 elements**

The data-link layer provides basic time-critical messaging communications between devices in an automation environment. This protocol provides communication opportunities to all participating data-link entities a) in a synchronously-starting cyclic manner, and b) in a cyclic or acyclic asynchronous manner, as requested each cycle by each of those data-link entities. Thus this protocol can be characterized as one which provides cyclic and acyclic access asynchronously but with a synchronous restart of each cycle.

Keel en

Asendab EVS-EN 61158-4-12:2008

**EVS-EN 61158-4-14:2012**

Hind 13,92

Identne EN 61158-4-14:2012

ja identne IEC 61158-4-14:2010

**Industrial communication networks - Fieldbus specifications - Part 4-14: Data-link layer protocol specification - Type 14 elements**

The data-link layer provides basic time-critical messaging communications between devices in an automation environment. This protocol provides communication opportunities to all participating data-link entities a) in a synchronously-starting cyclic manner, according to a pre-established schedule, and b) in a cyclic or acyclic asynchronous manner, as requested each cycle by each of those data-link entities. Thus this protocol can be characterized as one which provides cyclic and acyclic access asynchronously but with a synchronous restart of each cycle.

Keel en

Asendab EVS-EN 61158-4-14:2008

**EVS-EN 61158-4-18:2012**

Hind 14,69

Identne EN 61158-4-18:2012

ja identne IEC 61158-4-18:2010

**Industrial communication networks - Fieldbus specifications - Part 4-18: Data-link layer protocol specification - Type 18 elements**

The data-link layer provides basic time-critical messaging communications between devices in an automation environment. This protocol provides communication opportunities to all participating data-link entities a) in a synchronously-starting cyclic manner, according to a pre-established schedule, and b) in a cyclic or acyclic asynchronous manner, as requested each cycle by each of those data-link entities. Thus this protocol can be characterized as one which provides cyclic and acyclic access asynchronously but with a synchronous restart of each cycle.

Keel en

Asendab EVS-EN 61158-4-18:2008

**EVS-EN 61158-4-19:2012**

Hind 25,03

Identne EN 61158-4-19:2012

ja identne IEC 61158-4-19:2010

**Industrial communication networks - Fieldbus specifications - Part 4-19: Data-link layer protocol specification - Type 19 elements**

The data-link layer provides basic time-critical messaging communications between devices in an automation environment. This protocol provides communication opportunities to all participating data-link entities a) in a synchronously-starting cyclic manner, according to a pre-established schedule, and b) in a cyclic or acyclic asynchronous manner, as requested each cycle by each of those data-link entities. Thus this protocol can be characterized as one which provides cyclic and acyclic access asynchronously but with a synchronous restart of each cycle.

Keel en

Asendab EVS-EN 61158-4-19:2008

**EVS-EN 61158-4-21:2012**

Hind 23,62

Identne EN 61158-4-21:2012

ja identne IEC 61158-4-21:2010

**Industrial communication networks - Fieldbus specifications - Part 4-21: Data-link layer protocol specification - Type 21 elements**

The DLL provides basic time-critical data communications between devices in an automated environment. Type 21 provides priority-based cyclic and acyclic data communication using an internal collision-free, full-duplex dual-port Ethernet switch technology. For wide application in various automation applications, Type 21 does not restrict the cyclic/acyclic scheduling policy in the DLL.

Keel en

**EVS-EN 61158-4-22:2012**

Hind 19,05

Identne EN 61158-4-22:2012

ja identne IEC 61158-4-22:2010

**Industrial communication networks - Fieldbus specifications - Part 4-22: Data-link layer protocol specification - Type 22 elements**

The data-link layer provides basic time-critical messaging communications between devices in an automation environment. This protocol provides communication opportunities to all participating data-link entities a) in a synchronously-starting cyclic manner, according to a pre-established schedule, and b) in a cyclic or acyclic asynchronous manner, as requested each cycle by each of those data-link entities. Thus this protocol can be characterized as one which provides cyclic and acyclic access asynchronously but with a synchronous restart of each cycle.

Keel en

**EVS-EN 61158-5-10:2012**

Hind 43,87

Identne EN 61158-5-10:2012

ja identne IEC 61158-5-10:2010

**Industrial communication networks - Fieldbus specifications - Part 5-10: Application layer service definition - Type 10 elements**

The fieldbus Application Layer (FAL) provides user programs with a means to access the fieldbus communication environment. In this respect, the FAL can be viewed as a "window between corresponding application programs". This standard provides common elements for basic time-critical and non-time-critical messaging communications between application programs in an automation environment and material specific to type 10 fieldbus. The term "time-critical" is used to represent the presence of a time-window, within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant and possibly human life. This standard defines in an abstract way the externally visible service provided by the type 10 fieldbus Application Layer in terms of a) an abstract model for defining application resources (objects) capable of being manipulated by users via the use of the FAL service, b) the primitive actions and events of the service; c) the parameters associated with each primitive action and event, and the form which they take; and d) the interrelationship between these actions and events, and their valid sequences. The purpose of this standard is to define the services provided to a) the FAL user at the boundary between the user and the Application Layer of the Fieldbus Reference Model, and b) Systems Management at the boundary between the Application Layer and Systems Management of the Fieldbus Reference Model.

Keel en

Asendab EVS-EN 61158-5-10:2008

**EVS-EN 61158-5-12:2012**

Hind 23,62

Identne EN 61158-5-12:2012

ja identne IEC 61158-5-12:2010

**Industrial communication networks - Fieldbus specifications - Part 5-12: Application layer service definition - Type 12 elements**

The fieldbus Application Layer (FAL) provides user programs with a means to access the fieldbus communication environment. In this respect, the FAL can be viewed as a "window between corresponding application programs." This standard provides common elements for basic time-critical and non-time-critical messaging communications between application programs in an automation environment and material specific to Type 12 fieldbus. The term "time-critical" is used to represent the presence of a time-window, within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant and possibly human life. This standard defines in an abstract way the externally visible service provided by the different Types of the fieldbus Application Layer in terms of a) an abstract model for defining application resources (objects) capable of being manipulated by users via the use of the FAL service, b) the primitive actions and events of the service; c) the parameters associated with each primitive action and event, and the form which they take; and d) the interrelationship between these actions and events, and their valid sequences. The purpose of this standard is to define the services provided to a) the FAL user at the boundary between the user and the Application Layer of the Fieldbus Reference Model, and b) Systems Management at the boundary between the Application Layer and Systems Management of the Fieldbus Reference Model.

Keel en

Asendab EVS-EN 61158-5-12:2008

**EVS-EN 61158-5-14:2012**

Hind 22,15

Identne EN 61158-5-14:2012

ja identne IEC 61158-5-14:2010

**Industrial communication networks - Fieldbus specifications - Part 5-14: Application layer service definition - Type 14 elements**

The fieldbus application layer (FAL) provides user programs with a means to access the fieldbus communication environment. In this respect, the FAL can be viewed as a "window between corresponding application programs." This standard provides common elements for basic time-critical and non-time-critical messaging communications between application programs in an automation environment and material specific to Type 14 fieldbus. The term "time-critical" is used to represent the presence of a time-window, within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant and possibly human life.

Keel en

Asendab EVS-EN 61158-5-14:2008

**EVS-EN 61158-5-15:2012**

Hind 25,03

Identne EN 61158-5-15:2012

ja identne IEC 61158-5-15:2010

**Industrial communication networks - Fieldbus specifications - Part 5-15: Application layer service definition - Type 15 elements**

In network communications, as in many fields of engineering, it is a fact that "one size does not fit all." Engineering design is about making the right set of trade-offs, and these trade-offs must balance conflicting requirements such as simplicity, generality, ease of use, richness of features, performance, memory size and usage, scalability, determinism, and robustness. These trade-offs must be made in light of the types of information flow (e.g. periodic, one-to-many, request-reply, events), and the constraints imposed by the application and execution platforms. The Type 15 fieldbus provides two major communication mechanisms that complement each others to satisfy communication requirements in the field of automation: the Client/Server and the Publish/Subscribe paradigms. They can be used concurrently on the same device. Type 15 Client/Server operates in a Client/Server relationship. Its application layer service definitions and protocol specifications are independent of the underlying layers, and have been implemented on a variety of stacks and communication media, including EIA/TIA-232, EIA/TIA-422, EIA/TIA-425, HDLC (ISO 13239), fiber, TCP/IP, Wireless LANs and Radios.

Keel en

Asendab EVS-EN 61158-5-15:2008

**EVS-EN 61158-5-18:2012**

Hind 15,4

Identne EN 61158-5-18:2012

ja identne IEC 61158-5-18:2010

**Industrial communication networks - Fieldbus specifications - Part 5-18: Application layer service definition - Type 18 elements**

The fieldbus application layer (FAL) provides user programs with a means to access the fieldbus communication environment. In this respect, the FAL can be viewed as a "window between corresponding application programs." This part of IEC 61158 provides common elements for basic time-critical and non-time-critical messaging communications between application programs in an automation environment and material specific to Type 18 fieldbus. The term "time-critical" is used to represent the presence of a time-window, within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant and possibly human life. This part of IEC 61158 defines in an abstract way the externally visible service provided by the Type 18 fieldbus application layer in terms of a) an abstract model for defining application resources (objects) capable of being manipulated by users via the use of the FAL service, b) the primitive actions and events of the service; c) the parameters associated with each primitive action and event, and the form which they take; and d) the interrelationship between these actions and events, and their valid sequences. The purpose of this part of IEC 61158 is to define the services provided to a) the FAL user at the boundary between the user and the Application Layer of the Fieldbus Reference Model, and b) Systems Management at the boundary between the Application Layer and Systems Management of the Fieldbus Reference Model.

Keel en

Asendab EVS-EN 61158-5-18:2008

**EVS-EN 61158-5-19:2012**

Hind 14,69

Identne EN 61158-5-19:2012

ja identne IEC 61158-5-19:2010

**Industrial communication networks - Fieldbus specifications - Part 5-19: Application layer service definition - Type 19 elements**

The fieldbus application layer (FAL) provides user programs with a means to access the fieldbus communication environment. In this respect, the FAL can be viewed as a "window between corresponding application programs." This standard provides common elements for basic time-critical and non-time-critical messaging communications between application programs in an automation environment and material specific to Type 19 fieldbus. The term "time-critical" is used to represent the presence of a time-window, within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant and possibly human life. This standard defines in an abstract way the externally visible service provided by the fieldbus application layer in terms of a) an abstract model for defining application resources (objects) capable of being manipulated by users via the use of the FAL service, b) the primitive actions and events of the service; c) the parameters associated with each primitive action and event, and the form which they take; and d) the interrelationship between these actions and events, and their valid sequences. The purpose of this standard is to define the services provided to a) the FAL user at the boundary between the user and the application layer of the fieldbus reference model, and b) Systems Management at the boundary between the application layer and Systems Management of the fieldbus reference model.

Keel en

Asendab EVS-EN 61158-5-19:2008

**EVS-EN 61158-5-20:2012**

Hind 17,08

Identne EN 61158-5-20:2012

ja identne IEC 61158-5-20:2010

**Industrial communication networks - Fieldbus specifications - Part 5-20: Application layer service definition - Type 20 elements**

The fieldbus Application Layer (FAL) provides user programs with a means to access the fieldbus communication environment. In this respect, the FAL can be viewed as a "window between corresponding application programs." This part of IEC 61158 provides common elements for basic time-critical and non-time-critical messaging communications between application programs in an automation environment and material specific to Type 20 fieldbus. The term "time-critical" is used to represent the presence of a time-window, within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant and possibly human life. This standard defines in an abstract way the externally visible service provided by the different Types of the fieldbus Application Layer in terms of a) an abstract model for defining application resources (objects) capable of being manipulated by users via the use of the FAL service, b) the primitive actions and events of the service; c) the parameters associated with each primitive action and event, and the form which they take; and d) the interrelationship between these actions and events, and their valid sequences. The purpose of this standard is to define the services provided to a) the FAL user at the boundary between the user and the Application Layer of the Fieldbus Reference Model, and b) Systems Management at the boundary between the Application Layer and Systems Management of the Fieldbus Reference Model.

Keel en

Asendab EVS-EN 61158-5-20:2008

**EVS-EN 61158-5-21:2012**

Hind 20,74

Identne EN 61158-5-21:2012

ja identne IEC 61158-5-21:2010

**Industrial communication networks - Fieldbus specifications - Part 5-21: Application layer service definition - Type 21 elements**

The Fieldbus Application Layer (FAL) provides user programs with a means to access the fieldbus communication environment. In this respect, the FAL can be considered a window between corresponding application programs. This standard provides the common elements for basic time-critical and non-time-critical messaging communications between application programs in an automation environment as well as material specific to the Type 21 protocol. The term "time-critical" is used to represent the presence of a time-window within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant, and possibly human life. This standard defines, in an abstract way, the externally visible service provided by the FAL in terms of: a) an abstract model for defining application resources (objects) capable of being manipulated by users via the FAL service; b) the primitive actions and events of the service; c) the parameters associated with each primitive action and event, and the form that they take; d) the interrelationship between these actions and events, and their valid sequences. The purpose of this standard is to define the services provided to: a) the FAL-user at the boundary between the user and the application layer of the fieldbus Reference Model; b) systems management at the boundary between the application layer and systems management of the fieldbus Reference Model. This standard describes the structure and services of the IEC FAL, in conformance with the OSI Basic Reference Model (ISO/IEC 7498) and the OSI Application layer Structure (ISO/IEC 9545).

Keel en

**EVS-EN 61158-5-22:2012**

Hind 20,74

Identne EN 61158-5-22:2012

ja identne IEC 61158-5-22:2010

**Industrial communication networks - Fieldbus specifications - Part 5-22: Application layer service definition - Type 22 elements**

The fieldbus application layer (FAL) provides user programs with a means to access the fieldbus communication environment. In this respect, the FAL can be viewed as a "window between corresponding application programs." This standard provides common elements for basic time-critical and non-time-critical messaging communications between application programs in an automation environment and material specific to Type 22 fieldbus. The term "time-critical" is used to represent the presence of a time-window, within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant and possibly human life.

Keel en

**EVS-EN 61987-10:2009/AC:2012**

Hind 0

ja identne IEC 61987-10/Cor 1:2012

**Corrigendum 1 - Industrial-process measurement and control - Data structures and elements in process equipment catalogues - Part 10: Lists of properties (LOPs) for industrial-process measurement and control for electronic data exchange - Fundamentals**

Keel en

**ASENDATUD VÕI TÜHISTATUD STANDARDID****CEN/TS 15480-2:2007**

Identne CEN/TS 15480-2:2007

**Identification card systems - European Citizen Card - Part 2: Logical data structures and card services**

This Technical Specification specifies the logical characteristics and security features at the card/system interface for the European Citizen Card. The European Citizen Card is a smart card with Identification, Authentication and electronic Signature (IAS) services. Therefore: - the supported services are specified; - the supported data structures as well as the access to these structures are specified; - the command set is defined.

Keel en

Asendatud CEN/TS 15480-2:2012

**EVS-EN 61158-4-2:2008**

Identne EN 61158-4-2:2008

ja identne IEC 61158-4-2:2007

**Industrial communication networks - Fieldbus specifications - Part 5-2: Application layer service definition - Type 2 elements**

It provides user programs with a means to access the fieldbus communication environment. In this respect, the FAL can be viewed as a "window between corresponding application programs." This standard provides common elements for basic time-critical and non-time-critical messaging communications between application programs in an automation environment and material specific to Type 2 fieldbus. The term "time-critical" is used to represent the presence of a time-window, within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant and possibly human life. It includes the following significant changes with respect to the previous edition deletion of the former Type 6 fieldbus, and the placeholder for a Type 5 fieldbus data-link layer, for lack of market relevance; addition of new types of fieldbuses; division of this part into multiple parts numbered.

Keel en

Asendab EVS-EN 61158-4:2004

Asendatud EVS-EN 61158-4-2:2012

**EVS-EN 61158-4-3:2008**

Identne EN 61158-4-3:2008

ja identne IEC 61158-4-3:2007

**Industrial communication networks - Fieldbus specifications - Part 5-3: Application layer service definition - Type 3 elements**

It is one of a series produced to facilitate the interconnection of automation system components. It is related to other standards in the set as defined by the "three-layer" fieldbus reference model described in IEC/TR 61158 1. This sub-part contains material specific to Type 3 fieldbus. It includes the following significant changes with respect to the previous edition deletion of the former Type 6 fieldbus, and the placeholder for a Type 5 fieldbus data-link layer, for lack of market relevance; addition of new types of fieldbuses; division of this part into multiple parts numbered.

Keel en

Asendab EVS-EN 61158-4:2004

Asendatud EVS-EN 61158-4-3:2012

**EVS-EN 61158-5-2:2008**

Identne EN 61158-5-2:2008

ja identne IEC 61158-5-2:2007

**Industrial communication networks - Fieldbus specifications - Part 5-2: Application layer service definition - Type 2 elements**

It provides user programs with a means to access the fieldbus communication environment. In this respect, the FAL can be viewed as a "window between corresponding application programs." This standard provides common elements for basic time-critical and non-time-critical messaging communications between application programs in an automation environment and material specific to Type 2 fieldbus. The term "time-critical" is used to represent the presence of a time-window, within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant and possibly human life. It includes the following significant changes with respect to the previous edition deletion of the former Type 6 fieldbus, and the placeholder for a Type 5 fieldbus data-link layer, for lack of market relevance; addition of new types of fieldbuses; division of this part into multiple parts numbered.

Keel en

Asendab EVS-EN 61158-5:2004

Asendatud EVS-EN 61158-5-2:2012

**EVS-EN 61158-5-3:2008**

Identne EN 61158-5-3:2008  
 ja identne IEC 61158-5-3:2007

**Industrial communication networks - Fieldbus specifications - Part 5-3: Application layer service definition - Type 3 elements**

It is one of a series produced to facilitate the interconnection of automation system components. It is related to other standards in the set as defined by the "three-layer" fieldbus reference model described in IEC/TR 61158 1. This sub-part contains material specific to Type 3 fieldbus. It includes the following significant changes with respect to the previous edition deletion of the former Type 6 fieldbus, and the placeholder for a Type 5 fieldbus data-link layer, for lack of market relevance; addition of new types of fieldbuses; division of this part into multiple parts numbered.

Keel en  
 Asendab EVS-EN 61158-5:2004  
 Asendatud EVS-EN 61158-5-3:2012

**EVS-EN 61158-3-12:2008**

Identne EN 61158-3-12:2008  
 ja identne IEC 61158-3-12:2007

**Industrial communication networks - Fieldbus specifications - Part 3-12: Data-link layer service definition - Type 12 element**

It provides common elements for basic time-critical messaging communications between devices in an automation environment. The term "time-critical" is used to represent the presence of a time-window, within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant and possibly human life. It includes the following significant changes with respect to the previous edition deletion of the former Type 6 fieldbus, and the placeholder for a Type 5 fieldbus data-link layer, for lack of market relevance; addition of new types of fieldbuses; division of this part into multiple parts numbered.

Keel en  
 Asendab EVS-EN 61158-3:2004  
 Asendatud EVS-EN 61158-3-12:2012

**EVS-EN 61158-3-14:2008**

Identne EN 61158-3-14:2008  
 ja identne IEC 61158-3-14:2007

**Industrial communication networks - Fieldbus specifications - Part 3-14: Data-link layer service definition - Type 14 elements**

It provides common elements for basic time-critical messaging communications between devices in an automation environment. The term "time-critical" is used to represent the presence of a time-window, within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant and possibly human life. It includes the following significant changes with respect to the previous edition deletion of the former Type 6 fieldbus, and the placeholder for a Type 5 fieldbus data-link layer, for lack of market relevance; addition of new types of fieldbuses; division of this part into multiple parts numbered.

Keel en  
 Asendab EVS-EN 61158-3:2004  
 Asendatud EVS-EN 61158-3-14:2012

**EVS-EN 61158-3-19:2008**

Identne EN 61158-3-19:2008  
 ja identne IEC 61158-3-19:2007

**Industrial communication networks - Fieldbus specifications - Part 3-19: Data-link layer service definition - Type 19 elements**

It provides common elements for basic time-critical messaging communications between devices in an automation environment. The term "time-critical" is used to represent the presence of a time-window, within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant and possibly human life. It includes the following significant changes with respect to the previous edition deletion of the former Type 6 fieldbus, and the placeholder for a Type 5 fieldbus data-link layer, for lack of market relevance; addition of new types of fieldbuses; division of this part into multiple parts numbered.

Keel en  
 Asendab EVS-EN 61158-3:2004  
 Asendatud EVS-EN 61158-3-19:2012

**EVS-EN 61158-4-11:2008**

Identne EN 61158-4-11:2008  
 ja identne IEC 61158-4-11:2007

**Industrial communication networks - Fieldbus specifications - Part 4-11: Data-link layer protocol specification - Type 11 elements**

It provides basic time-critical messaging communications between devices in an automation environment. This protocol provides communication opportunities to all participating data-link entities in a synchronously-starting cyclic manner, according to a pre-established schedule, and in a cyclic or acyclic asynchronous manner, as requested each cycle by each of those data-link entities. Thus this protocol can be characterized as one which provides cyclic and acyclic access asynchronously but with a synchronous restart of each cycle. It includes the following significant changes with respect to the previous edition deletion of the former Type 6 fieldbus, and the placeholder for a Type 5 fieldbus data-link layer, for lack of market relevance; addition of new types of fieldbuses; division of this part into multiple parts numbered.

Keel en  
 Asendab EVS-EN 61158-4:2004  
 Asendatud EVS-EN 61158-4-11:2012



**EVS-EN 61158-4-12:2008**

Identne EN 61158-4-12:2008  
ja identne IEC 61158-4-12:2007

**Industrial communication networks - Fieldbus specifications - Part 4-12: Data-link layer protocol specification - Type 12 elements**

It provides basic time-critical messaging communications between devices in an automation environment. This protocol provides communication opportunities to all participating data-link entities in a synchronously-starting cyclic manner, and in a cyclic or acyclic asynchronous manner, as requested each cycle by each of those data-link entities. Thus this protocol can be characterized as one which provides cyclic and acyclic access asynchronously but with a synchronous restart of each cycle. It includes the following significant changes with respect to the previous edition deletion of the former Type 6 fieldbus, and the placeholder for a Type 5 fieldbus data-link layer, for lack of market relevance; addition of new types of fieldbuses; division of this part into multiple parts numbered.

Keel en

Asendab EVS-EN 61158-4:2004  
Asendatud EVS-EN 61158-4-12:2012

**EVS-EN 61158-4-14:2008**

Identne EN 61158-4-14:2008  
ja identne IEC 61158-4-14:2007

**Industrial communication networks - Fieldbus specifications - Part 4-14: Data-link layer protocol specification - Type 14 elements**

It provides basic time-critical messaging communications between devices in an automation environment. This protocol provides communication opportunities to all participating data-link entities in a synchronously-starting cyclic manner, according to a pre-established schedule, and in a cyclic or acyclic asynchronous manner, as requested each cycle by each of those data-link entities. Thus this protocol can be characterized as one which provides cyclic and acyclic access asynchronously but with a synchronous restart of each cycle. It includes the following significant changes with respect to the previous edition deletion of the former Type 6 fieldbus, and the placeholder for a Type 5 fieldbus data-link layer, for lack of market relevance; addition of new types of fieldbuses; division of this part into multiple parts numbered.

Keel en

Asendab EVS-EN 61158-4:2004  
Asendatud EVS-EN 61158-4-14:2012

**EVS-EN 61158-4-18:2008**

Identne EN 61158-4-18:2008  
ja identne IEC 61158-4-18:2007

**Industrial communication networks - Fieldbus specifications - Part 4-18: Data-link layer protocol specification - Type 18 elements**

It provides basic time-critical messaging communications between devices in an automation environment. This protocol provides communication opportunities to all participating data-link entities in a synchronously-starting cyclic manner, according to a pre-established schedule, and in a cyclic or acyclic asynchronous manner, as requested each cycle by each of those data-link entities. Thus this protocol can be characterized as one which provides cyclic and acyclic access asynchronously but with a synchronous restart of each cycle. It includes the following significant changes with respect to the previous edition deletion of the former Type 6 fieldbus, and the placeholder for a Type 5 fieldbus data-link layer, for lack of market relevance; addition of new types of fieldbuses; division of this part into multiple parts numbered.

Keel en

Asendab EVS-EN 61158-4:2004  
Asendatud EVS-EN 61158-4-18:2012

**EVS-EN 61158-4-19:2008**

Identne EN 61158-4-19:2008  
ja identne IEC 61158-4-19:2007

**Industrial communication networks - Fieldbus specifications - Part 4-19: Data-link layer protocol specification - Type 19 elements**

It provides basic time-critical messaging communications between devices in an automation environment. This protocol provides communication opportunities to all participating data-link entities in a synchronously-starting cyclic manner, according to a pre-established schedule, and in a cyclic or acyclic asynchronous manner, as requested each cycle by each of those data-link entities. Thus this protocol can be characterized as one which provides cyclic and acyclic access asynchronously but with a synchronous restart of each cycle. It includes the following significant changes with respect to the previous edition deletion of the former Type 6 fieldbus, and the placeholder for a Type 5 fieldbus data-link layer, for lack of market relevance; addition of new types of fieldbuses; division of this part into multiple parts numbered.

Keel en

Asendab EVS-EN 61158-4:2004  
Asendatud EVS-EN 61158-4-19:2012

**EVS-EN 61158-5-10:2008**

Identne EN 61158-5-10:2008

ja identne IEC 61158-5-10:2007

**Industrial communication networks - Fieldbus specifications - Part 5-10: Application layer service definition - Type 10 elements**

It provides user programs with a means to access the fieldbus communication environment. In this respect, the FAL can be viewed as a "window between corresponding application programs." This standard provides common elements for basic time-critical and non-time-critical messaging communications between application programs in an automation environment and material specific to type 10 fieldbus. The term "time-critical" is used to represent the presence of a time-window, within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant and possibly human life. It includes the following significant changes with respect to the previous edition deletion of the former Type 6 fieldbus, and the placeholder for a Type 5 fieldbus data-link layer, for lack of market relevance; addition of new types of fieldbuses; division of this part into multiple parts numbered.

Keel en

Asendab EVS-EN 61158-5:2004

Asendatud EVS-EN 61158-5-10:2012

**EVS-EN 61158-5-12:2008**

Identne EN 61158-5-12:2008

ja identne IEC 61158-5-12:2007

**Industrial communication networks - Fieldbus specifications - Part 5-12: Application layer service definition - Type 12 elements**

1.1 Overview The fieldbus Application Layer (FAL) provides user programs with a means to access the fieldbus communication environment. In this respect, the FAL can be viewed as a "window between corresponding application programs." This standard provides common elements for basic time-critical and non-time-critical messaging communications between application programs in an automation environment and material specific to Type 12 fieldbus. The term "time-critical" is used to represent the presence of a time-window, within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant and possibly human life. This standard defines in an abstract way the externally visible service provided by the different Types of the fieldbus Application Layer in terms of a) an abstract model for defining application resources (objects) capable of being manipulated by users via the use of the FAL service, b) the primitive actions and events of the service; c) the parameters associated with each primitive action and event, and the form which they take; and d) the interrelationship between these actions and events, and their valid sequences. The purpose of this standard is to define the services provided to 1) the FAL user at the boundary between the user and the Application Layer of the Fieldbus Reference Model, and 2) Systems Management at the boundary between the Application Layer and Systems Management of the Fieldbus Reference Model. This standard specifies the structure and services of the IEC fieldbus Application Layer, in conformance with the OSI Basic Reference Model (ISO/IEC 7498) and the OSI Application Layer Structure (ISO/IEC 9545). FAL services and protocols are provided by FAL application-entities (AE) contained within the application processes. The FAL AE is composed of a set of object-oriented Application Service Elements (ASEs) and a Layer Management Entity (LME) that manages the AE. The ASEs provide communication services that operate on a set of related application process object (APO) classes. One of the FAL ASEs is a management ASE that provides a common set of services for the management of the instances of FAL classes. Although these services specify, from the perspective of applications, how request and responses are issued and delivered, they do not include a specification of what the requesting and responding applications are to do with them. That is, the behavioral aspects of the applications are not specified; only a definition of what requests and responses they can send/receive is specified. This permits greater flexibility to the FAL users in standardizing such object behavior. In addition to these services, some supporting services are also defined in this standard to provide access to the FAL to control certain aspects of its operation.

1.2 Specifications The principal objective of this standard is to specify the characteristics of conceptual application layer services suitable for time-critical communications, and thus supplement the OSI Basic Reference Model in guiding the development of application layer protocols for time-critical communications. A secondary objective is to provide migration paths from previously-existing industrial communications protocols. It is this latter objective which gives rise to the diversity of services standardized as the various Types of IEC 61158, and the

corresponding protocols standardized in subparts of IEC 61158-6. This specification may be used as the basis for formal Application Programming-Interfaces. Nevertheless, it is not a formal programming interface, and any such interface will need to address implementation issues not covered by this specification, including a) the sizes and octet ordering of various multi-octet service parameters, and b) the correlation of paired request and confirm, or indication and response, primitives. 1.3 Conformance This standard does not specify individual implementations or products, nor does it constrain the implementations of application layer entities within industrial automation systems. There is no conformance of equipment to this application layer service definition standard. Instead, conformance is achieved through implementation of conforming application layer protocols that fulfill any given Type of application layer services as defined in this standard.

Keel en

Asendab EVS-EN 61158-5:2004

Asendatud EVS-EN 61158-5-12:2012

## **EVS-EN 61158-5-14:2008**

Identne EN 61158-5-14:2008

ja identne IEC 61158-5-14:2007

### **Industrial communication networks - Fieldbus specifications - Part 5-14: Application layer service definition - Type 14 elements**

1.1 Overview The fieldbus application layer (FAL) provides user programs with a means to access the fieldbus communication environment. In this respect, the FAL can be viewed as a “window between corresponding application programs.” This standard provides common elements for basic time-critical and non-time-critical messaging communications between application programs in an automation environment and material specific to Type 14 fieldbus. The term “time-critical” is used to represent the presence of a time-window, within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant and possibly human life. This standard defines in an abstract way the externally visible service provided by the Type 14 fieldbus application layer in terms of a) an abstract model for defining application resources (objects) capable of being manipulated by users via the use of the FAL service; b) the primitive actions and events of the service; c) the parameters associated with each primitive action and event, and the form which they take; and d) the interrelationship between these actions and events, and their valid sequences. The purpose of this standard is to define the services provided to 1) the FAL user at the boundary between the user and the application layer of the fieldbus reference model, and 2) Systems Management at the boundary between the application layer and Systems Management of the fieldbus reference model. This standard specifies the structure and services of the Type 14 fieldbus application layer, in conformance with the OSI Basic Reference Model (ISO/IEC 7498) and the OSI application layer structure (ISO/IEC 9545). FAL services and protocols are provided by FAL application-entities (AE) contained within the application processes. The FAL AE is composed of a set of object-oriented application service elements (ASEs) and a layer management entity (LME) that manages the AE. The ASEs provide communication services that operate on a set of related application process object (APO) classes. One of the FAL ASEs is a management ASE that provides a common set of services for the management of the instances of FAL classes. Although these services specify, from the perspective of applications, how request and responses are issued and delivered, they do not include a specification of what the requesting and responding applications are to do with them. That is, the behavioral aspects of the applications are not specified; only a definition of what requests and responses they can send/receive is specified. This permits greater flexibility to the FAL users in standardizing such object behavior. In addition to these services, some supporting services are also defined in this standard to provide access to the FAL to control certain aspects of its operation. 1.2 Specifications The principal objective of this standard is to specify the characteristics of conceptual application layer services suitable for time-critical communications, and thus supplement the OSI Basic Reference Model in guiding the development of application layer protocols for time-critical communications. A secondary objective is to provide migration paths from previously-existing industrial communications protocols. It is this latter objective which gives rise to the diversity of services standardized as the

various types of IEC 61158. This specification may be used as the basis for formal Application Programming Interfaces. Nevertheless, it is not a formal programming interface, and any such interface will need to address implementation issues not covered by this specification, including a) the sizes and octet ordering of various multi-octet service parameters, and b) the correlation of paired request and confirm, or indication and response, primitives. 1.3 Conformance This standard does not specify individual implementations or products, nor do they constrain the implementations of application layer entities within industrial automation systems. There is no conformance of equipment to this application layer service definition standard. Instead, conformance is achieved through implementation of conforming application layer protocols that fulfill the Type 14 application layer services as defined in this standard.

Keel en

Asendab EVS-EN 61158-5:2004

Asendatud EVS-EN 61158-5-14:2012

## **EVS-EN 61158-5-15:2008**

Identne EN 61158-5-15:2008

ja identne IEC 61158-5-15:2007

### **Industrial communication networks - Fieldbus specifications - Part 5-15: Application layer service definition - Type 15 elements**

1.1 Overview In network communications, as in many fields of engineering, it is a fact that "one size does not fit all." Engineering design is about making the right set of trade-offs, and these trade-offs must balance conflicting requirements such as simplicity, generality, ease of use, richness of features, performance, memory size and usage, scalability, determinism, and robustness. These trade-offs must be made in light of the types of information flow (e.g. periodic, one-to-many, request-reply, events), and the constraints imposed by the application and execution platforms. The Type 15 fieldbus provides two major communication mechanisms that complement each others to satisfy communication requirements in the field of automation: the Client/Server and the Publish/Subscribe paradigms. They can be used concurrently on the same device. Type 15 Client/Server operates in a Client/Server relationship. Its application layer service definitions and protocol specifications are independent of the underlying layers, and have been implemented on a variety of stacks and communication media, including EIA/TIA-232, EIA/TIA-422, EIA/TIA-425, HDLC (ISO 13239), fiber, TCP/IP, Wireless LANs and Radios. Type 15 Publish/Subscribe operates in a Publish/Subscribe relationship. Its application layer service definitions and protocol specifications are independent of the underlying layers and can be configured to provide reliable behaviour and support determinism. The most common stack is UDP/IP. The fieldbus application layer (FAL) provides user programs with a means to access the fieldbus communication environment. In this respect, the FAL can be viewed as a "window between corresponding application programs." This part of IEC 61158 provides common elements for basic time-critical and non-time-critical messaging communications between application programs in an automation environment and material specific to Type 15 fieldbus. The term "time-critical" is used to represent the presence of a time-window, within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant and possibly human life. This part of IEC 61158 define in an abstract way the externally visible service provided by the Type 15 fieldbus application layer in terms of a) an abstract model for defining application resources (objects) capable of being manipulated by users via the use of the FAL service, b) the primitive actions and events of the service; c) the parameters associated with each primitive action and event, and the form which they take; and d) the interrelationship between these actions and events, and their valid sequences. The purpose of this part of IEC 61158 is to define the services provided to 1) the FAL user at the boundary between the user and the Application Layer of the Fieldbus Reference Model, and 2) Systems Management at the boundary between the Application Layer and Systems Management of the Fieldbus Reference Model. This part of IEC 61158 specifies the structure and services of the Type 15 IEC fieldbus Application Layer, in conformance with the OSI Basic Reference Model (ISO/IEC 7498) and the OSI Application Layer Structure (ISO/IEC 9545). FAL services and protocols are provided by FAL application-entities (AE) contained within the application processes. The FAL AE is composed of a set of object-oriented

Application Service Elements (ASEs) and a Layer Management Entity (LME) that manages the AE. The ASEs provide communication services that operate on a set of related application process object (APO) classes. One of the FAL ASEs is a management ASE that provides a common set of services for the management of the instances of FAL classes. Although these services specify, from the perspective of applications, how request and responses are issued and delivered, they do not include a specification of what the requesting and responding applications are to do with them. That is, the behavioral aspects of the applications are not specified; only a definition of what requests and responses they can send/receive is specified. This permits greater flexibility to the FAL users in standardizing such object behavior. In addition to these services, some supporting services are also defined in this standard to provide access to the FAL to control certain aspects of its operation.

### 1.2 Specifications

The principal objective of this part of IEC 61158 is to specify the characteristics of conceptual application layer services suitable for time-critical communications, and thus supplement the OSI Basic Reference Model in guiding the development of application layer protocols for time-critical communications. A secondary objective is to provide migration paths from previously-existing industrial communications protocols. It is this latter objective which gives rise to the diversity of services standardized as the various Types of IEC 61158, and the corresponding protocols standardized in subparts of IEC 61158-6. This specification may be used as the basis for formal Application Programming-Interfaces. Nevertheless, it is not a formal programming interface, and any such interface will need to address implementation issues not covered by this specification, including a) the sizes and octet ordering of various multi-octet service parameters, and b) the correlation of paired request and confirm, or indication and response, primitives.

### 1.3 Conformance

This part of IEC 61158 does not specify individual implementations or products, nor do they constrain the implementations of application layer entities within industrial automation systems. There is no conformance of equipment to this application layer service definition standard. Instead, conformance is achieved through implementation of conforming application layer protocols that fulfill the Type 15 application layer services as defined in this part of IEC 61158.

### 1.4 Type overview

In network communications, as in many fields of engineering, it is a fact that "one size does not fit all." Engineering design is about making the right set of trade-offs, and these trade-offs must balance conflicting requirements such as simplicity, generality, ease of use, richness of features, performance, memory size and usage, scalability, determinism, and robustness. These trade-offs must be made in light of the types of information flow (e.g. periodic, one-to-many, request-reply, events), and the constraints imposed by the application and execution platforms. The Type 15 fieldbus provides two major communication mechanisms that complement each others to satisfy communication requirements in the field of automation: the Client/Server and the Publish/Subscribe paradigms. They can be used concurrently on the same device. Type 15 Client/Server operates in a Client/Server relationship. Its application layer service definitions and protocol specifications are independent of the underlying layers, and have been implemented on a variety of stacks and communication media, including EIA/TIA-232, EIA/TIA-422, EIA/TIA-425, HDLC (ISO 13239), fiber, TCP/IP, Wireless LANs and Radios. Type 15 Publish/Subscribe operates in a Publish/Subscribe relationship. Its application layer service definitions and protocol specifications are independent of the underlying layers and can be

configured to provide reliable behavior and support determinism. The most common stack is UDP/IP.

Keel en

Asendab EVS-EN 61158-5:2004

Asendatud EVS-EN 61158-5-15:2012

## **EVS-EN 61158-5-18:2008**

Identne EN 61158-5-18:2008

ja identne IEC 61158-5-18:2007

### **Industrial communication networks - Fieldbus specifications - Part 5-18: Application layer service definition - Type 18 elements**

1.1 Overview The fieldbus application layer (FAL) provides user programs with a means to access the fieldbus communication environment. In this respect, the FAL can be viewed as a “window between corresponding application programs.” This part of IEC 61158 provides common elements for basic time-critical and non-time-critical messaging communications between application programs in an automation environment and material specific to Type 18 fieldbus. The term “time-critical” is used to represent the presence of a time-window, within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant and possibly human life. This part of IEC 61158 define in an abstract way the externally visible service provided by the Type 18 fieldbus application layer in terms of a) an abstract model for defining application resources (objects) capable of being manipulated by users via the use of the FAL service, b) the primitive actions and events of the service; c) the parameters associated with each primitive action and event, and the form which they take; and d) the interrelationship between these actions and events, and their valid sequences. The purpose of this part of IEC 61158 is to define the services provided to 1) the FAL user at the boundary between the user and the Application Layer of the Fieldbus Reference Model, and 2) Systems Management at the boundary between the Application Layer and Systems Management of the Fieldbus Reference Model. This part of IEC 61158 specifies the structure and services of the Type 18 IEC fieldbus Application Layer, in conformance with the OSI Basic Reference Model (ISO/IEC 7498) and the OSI Application Layer Structure (ISO/IEC 9545). FAL services and protocols are provided by FAL application-entities (AE) contained within the application processes. The FAL AE is composed of a set of object-oriented Application Service Elements (ASEs) and a Layer Management Entity (LME) that manages the AE. The ASEs provide communication services that operate on a set of related application process object (APO) classes. One of the FAL ASEs is a management ASE that provides a common set of services for the management of the instances of FAL classes. Although these services specify, from the perspective of applications, how request and responses are issued and delivered, they do not include a specification of what the requesting and responding applications are to do with them. That is, the behavioral aspects of the applications are not specified; only a definition of what requests and responses they can send/receive is specified. This permits greater flexibility to the FAL users in standardizing such object behavior. In addition to these services, some supporting services are also defined in this standard to provide access to the FAL to control certain aspects of its operation. 1.2 Specifications The principal objective of this part of IEC 61158 is to specify the characteristics of conceptual application layer services suitable for time-critical communications, and thus supplement the OSI Basic Reference Model in guiding the development of application layer protocols for time-critical communications. A secondary objective is to provide migration paths from previously-existing industrial communications protocols. It is this latter objective which gives rise to the diversity of services standardized as the

various Types of IEC 61158, and the corresponding protocols standardized in subparts of IEC 61158-6. This specification may be used as the basis for formal Application Programming-Interfaces. Nevertheless, it is not a formal programming interface, and any such interface will need to address implementation issues not covered by this specification, including a) the sizes and octet ordering of various multi-octet service parameters, and b) the correlation of paired request and confirm, or indication and response, primitives. 1.3 Conformance This part of IEC 61158 does not specify individual implementations or products, nor do they constrain the implementations of application layer entities within industrial automation systems. There is no conformance of equipment to this application layer service definition standard. Instead, conformance is achieved through implementation of conforming application layer protocols that fulfill the Type 18 application layer services as defined in this part of IEC 61158.

Keel en

Asendab EVS-EN 61158-5:2004

Asendatud EVS-EN 61158-5-18:2012

## **EVS-EN 61158-5-19:2008**

Identne EN 61158-5-19:2008

ja identne IEC 61158-5-19:2007

### **Industrial communication networks - Fieldbus specifications - Part 5-19: Application layer service definition - Type 19 elements**

1.1 Overview The fieldbus application layer (FAL) provides user programs with a means to access the fieldbus communication environment. In this respect, the FAL can be viewed as a "window between corresponding application programs." This standard provides common elements for basic time-critical and non-time-critical messaging communications between application programs in an automation environment and material specific to Type 19 fieldbus. The term "time-critical" is used to represent the presence of a time-window, within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant and possibly human life. This standard defines in an abstract way the externally visible service provided by the fieldbus application layer in terms of a) an abstract model for defining application resources (objects) capable of being manipulated by users via the use of the FAL service, b) the primitive actions and events of the service; c) the parameters associated with each primitive action and event, and the form which they take; and d) the interrelationship between these actions and events, and their valid sequences. The purpose of this standard is to define the services provided to 1) the FAL user at the boundary between the user and the application layer of the fieldbus reference model, and 2) Systems Management at the boundary between the application layer and Systems Management of the fieldbus reference model. This standard specifies the structure and services of the fieldbus application layer, in conformance with the OSI Basic Reference Model (ISO/IEC 7498) and the OSI application layer structure (ISO/IEC 9545). FAL services and protocols are provided by FAL application-entities (AE) contained within the application processes. The FAL AE is composed of a set of object-oriented application service elements (ASEs) and a layer management entity (LME) that manages the AE. The ASEs provide communication services that operate on a set of related application process object (APO) classes. One of the FAL ASEs is a management ASE that provides a common set of services for the management of the instances of FAL classes. Although these services specify, from the perspective of applications, how request and responses are issued and delivered, they do not include a specification of what the requesting and responding applications are to do with them. That is, the behavioral aspects of the applications are not specified; only a definition of what requests and responses they can send/receive is specified. This permits greater flexibility to the FAL users in standardizing such object behavior. In addition to these services, some supporting services are also defined in this standard to provide access to the FAL to control certain aspects of its operation.

1.2 Specifications The principal objective of this standard is to specify the characteristics of conceptual application layer services suitable for time-critical communications, and thus supplement the OSI Basic Reference Model in guiding the development of application layer protocols for time-critical communications. A secondary objective is to provide migration paths from previously-existing industrial communications protocols. It is this latter objective which gives rise to the diversity of services standardized as the various Types of IEC 61158, and the

corresponding protocols standardized in subparts of IEC 61158-6. This specification may be used as the basis for formal application programming interfaces. Nevertheless, it is not a formal programming interface, and any such interface will need to address implementation issues not covered by this specification, including a) the sizes and octet ordering of various multi-octet service parameters, and b) the correlation of paired request and confirm, or indication and response, primitives.

1.3 Conformance This standard does not specify individual implementations or products, nor does it constrain the implementations of application layer entities within industrial automation systems. There is no conformance of equipment to this application layer service definition standard. Instead, conformance is achieved through implementation of conforming application layer protocols that fulfill the application layer services as defined in this standard.

Keel en

Asendab EVS-EN 61158-5:2004

Asendatud EVS-EN 61158-5-19:2012

## **EVS-EN 61158-5-20:2008**

Identne EN 61158-5-20:2008

ja identne IEC 61158-5-20:2007

### **Industrial communication networks - Fieldbus specifications - Part 5-20: Application layer service definition -Type 20 elements**

1.1 Overview The fieldbus Application Layer (FAL) provides user programs with a means to access the fieldbus communication environment. In this respect, the FAL can be viewed as a "window between corresponding application programs." This part of IEC 61158 provides common elements for basic time-critical and non-time-critical messaging communications between application programs in an automation environment and material specific to Type 20 fieldbus. The term "time-critical" is used to represent the presence of a time-window, within which one or more specified actions are required to be completed with some defined level of certainty. Failure to complete specified actions within the time window risks failure of the applications requesting the actions, with attendant risk to equipment, plant and possibly human life. This standard defines in an abstract way the externally visible service provided by the different Types of the fieldbus Application Layer in terms of a) an abstract model for defining application resources (objects) capable of being manipulated by users via the use of the FAL service, b) the primitive actions and events of the service; c) the parameters associated with each primitive action and event, and the form which they take; and d) the interrelationship between these actions and events, and their valid sequences. The purpose of this standard is to define the services provided to 1) the FAL user at the boundary between the user and the Application Layer of the Fieldbus Reference Model, and 2) Systems Management at the boundary between the Application Layer and Systems Management of the Fieldbus Reference Model. This standard specifies the structure and services of the IEC fieldbus Application Layer, in conformance with the OSI Basic Reference Model (ISO/IEC 7498) and the OSI Application Layer Structure (ISO/IEC 9545). FAL services and protocols are provided by FAL application-entities (AE) contained within the application processes. The FAL AE is composed of a set of object-oriented Application Service Elements (ASEs) and a Layer Management Entity (LME) that manages the AE. The ASEs provide communication services that operate on a set of related application process object (APO) classes. One of the FAL ASEs is a management ASE that provides a common set of services for the management of the instances of FAL classes. Although these services specify, from the perspective of applications, how request and responses are issued and delivered, they do not include a specification of what the requesting and responding applications are to do with them. That is, the behavioral aspects of the applications are not specified; only a definition of what requests and responses they can send/receive is specified. This permits greater flexibility to the FAL users in standardizing such object behavior. In addition to these services, some supporting services are also defined in this standard to provide access to the FAL to control certain aspects of its operation. 1.2 Specifications The principal objective of this standard is to specify the characteristics of conceptual application layer services suitable for time-critical communications, and thus supplement the OSI Basic Reference Model in guiding the development of application layer protocols for time-critical communications. A secondary objective is to provide migration paths from previously-existing industrial communications protocols. It is this latter objective which gives rise to the diversity of services standardized as the various types of IEC 61158. This

specification may be used as the basis for formal Application Programming-Interfaces. Nevertheless, it is not a formal programming interface, and any such interface will need to address implementation issues not covered by this specification, including a) the sizes and octet ordering of various multi-octet service parameters, and b) the correlation of paired request and confirm, or indication and response, primitives. 1.3 Conformance This standard does not specify individual implementations or products, nor do they constrain the implementations of application layer entities within industrial automation systems. There is no conformance of equipment to this application layer service definition standard. Instead, conformance is achieved through implementation of conforming application layer protocols that fulfill the Type 20 application layer services as defined in this standard.

Keel en

Asendab EVS-EN 61158-5:2004

Asendatud EVS-EN 61158-5-20:2012

### **KAVANDITE ARVAMUSKÜSITLUS**

#### **prEVS-ISO/IEC 10646**

ja identne ISO/IEC 10646:2012

Tähtaeg 29.08.2012

#### **Infotehnoloogia. Universaalne koodimärgistik (UCS)**

See rahvusvaheline standard kirjeldab universaalset koodimärgistikku (UCS). See on rakendatav maailma keelte ja lisasümbolite esituseks, edastamiseks, vahetamiseks, töötlemiseks, talletamiseks, sisestamiseks ja esitamiseks kirjalikus vormis. See rahvusvaheline standard: • täpsustab selle rahvusvahelise standardi arhitektuuri; • defineerib selles rahvusvahelises standardis kasutatud termineid; • kirjeldab koodimärgistiku koodiruumi üldstruktuuri; • kirjeldab UCSi mitmekeelset põhitasandit (BMP); • kirjeldab UCSi lisatasandeid: mitmekeelne lisatasand (SMP), ideograafiline lisatasand (SIP), tertsiaalne lisatasand (TIP) ja eriotstarbeline lisatasand (SSP); • määratleb graafiliste märkide kogumi, mida kasu-tatakse ülemaailmselt skriptides ja loomulike keelte kirjapildis; • täpsustab graafiliste märkide ja vormingu märkide nimesid BMP, SMP, SIP, TIP, SSP ja nende kodeeritud esituste jaoks UCS koodiruumis; • täpsustab juhtmärkide ja privaاتمärkide kodeeritud esitust; • täpsustab kolme UCS kodeerimisvormi: UTF-8, UTF-16, and UTF-32; • täpsustab seitse UCS kodeerimiskeemi: UTF-8, UTF-16, UTF-16BE, UTF-16LE, UTF-32, UTF-32BE, and UTF-32LE; • täpsustab selle koodimärgistiku tulevaste lisandite haldust. UCS on ISO/IEC 2022 standardis kirjeldatud erinev kodeerimissüsteem. Meetod, kuidas eristada UCSi standardist ISO/IEC 2022, on täpsustatud punktis 12.2. Graafiline märk omistatakse standardis ainult ühele märgi koodipositsioonile, mis asub kas BMPs või mõnel lisatasandil. MÄRKUS Unicode standardi versioon 6.1 sisaldab märkide, nimede ja kodeeritud esituste kogumit, mis on käesoleva rahvusvahelise standardi omaga identsed. Lisaks annab see üksikasjalikumad teavet märkide omaduste, töötlusalgoritmide ja definitsioonide kohta, mis on rakendajatele kasulikud.

Keel en

Asendab EVS-ISO/IEC 10646:2011

#### **prEVS-ISO/IEC 10373-6:2011/A1**

ja identne ISO/IEC 10373-6:2011/Amd 1:2012

Tähtaeg 29.08.2012

#### **Identifitseerimiskaardid. Katsemeetodid. Osa 6: Kaugtoimekaardid. Muudatus 1: Kaugtoimekaartide lisaklassid**

Keel en



## prEN 15208

Identne prEN 15208 rev:2012

Tähtaeg 29.08.2012

### **Tanks for transport of dangerous goods - Sealed parcel delivery systems - Working principles and interface specifications**

This European Standard is applicable to sealed parcel delivery systems used with transport tanks and specifies the performance requirements, critical safety aspects, data transfer methods between loading gantries and transport tank, transport tank and delivery points, other optional communications and tests to provide functional and compatible systems. Sealed parcel delivery systems covered by this European Standard is for bottom loaded transport tanks. The systems specified by this European Standard are suitable for use with liquid petroleum products and other dangerous substances of Class 3 of ADR which have a vapour pressure not exceeding 110 kPa at 50 °C and petrol, and which have no sub-classification as toxic or corrosive.

Keel en

Asendab EVS-EN 15208:2007

## **39 TÄPPISMEHAANIKA. JUVEELITOOTED**

### **UUED STANDARDID JA PUBLIKATSIOONID**

#### **EVS-EN 1811:2011/AC:2012**

Hind 0

Identne EN 1811:2011/AC:2012

#### **Põhimeetod nikli eraldumise määramiseks needikomplektides, mis läbivad augustatud kehaosi ja toodetes, mida kasutatakse nahaga vahetus pikaajalises kontaktis**

Keel en

## **43 MAANTEESÕIDUKITE EHITUS**

### **UUED STANDARDID JA PUBLIKATSIOONID**

#### **EVS-EN 16029:2012**

Hind 19,05

Identne EN 16029:2012

#### **Ride-on, motorized vehicles intended for the transportation of persons and not intended for use on public roads - Single-track two-wheel motor vehicles - Safety requirements and test methods**

This European Standard specifies the safety requirements and the test methods for single-track two-wheel motor vehicles, driven by a rider sitting astride. This European Standard deals with all significant hazards, hazardous situations and events relevant to single-track two-wheel motor vehicles propelled by a spark ignited internal combustion engine (hereinafter referred to as "vehicles"), when they are used as intended and under the conditions of misuse which are reasonably foreseeable by the manufacturer. The vehicles covered by this European Standard are not intended to be used on public roads. The vehicles covered by this European Standard are intended only for the rider and not for passengers. This European Standard does not cover vehicles propelled with gaseous fuels. This European Standard specifies the appropriate measures to eliminate or reduce the risks arising from the significant hazards, hazardous situations and events (see Clause 4) during commissioning, operation and maintenance of the vehicles when carried out in accordance with the specifications as intended by the manufacturer. This European Standard is not applicable to vehicles which are manufactured before the date of publication of this European Standard by CEN.

Keel en

### **ASENDATUD VÕI TÜHISTATUD STANDARDID**

#### **EVS-EN 1865:2000**

Identne EN 1865:1999

#### **Kiirabiautodes kasutatavate kanderaamide ja teiste patsiendi transpordi abivahendite spetsifikatsioonid**

Käesolev standard sätestab kiirabiautodes kasutatavatele kanderaamidele ja teistele patsiendi transpordi abivahenditele esitatavaid miinimumnõuded niisugusel viisil, et lisakahjustuste tekke võimalus oleks minimaalne.

Keel et

Asendatud EVS-EN 1865-1:2010; EVS-EN 1865-2:2010; EVS-EN 1865-5:2012; EVS-EN 1865-4:2012; EVS-EN 1865-3:2012

## KAVANDITE ARVAMUSKÜSITLUS

### **prEN 50436-1**

Identne prEN 50436-1:2012

Tähtaeg 29.08.2012

#### **Alcohol interlocks - Test methods and performance requirements - Part 1: Instruments for drink-driving-offender programs**

This European Standard specifies test methods and performance requirements for breath alcohol controlled alcohol interlocks. It covers alcohol interlocks intended to be used in programmes for drink driving offenders as well as in programmes monitored or controlled in a comparable way. This European Standard is directed at test laboratories and manufacturers of alcohol interlocks. It defines requirements and test procedures for type approval. Several parameters (such as alcohol concentration or breath volume) are specified in this European Standard for the purpose of type testing according to this European Standard only. However, it may be necessary due to national regulations or depending on user requests to set the values of the prescribed parameters differently when the alcohol interlocks are in use. This European Standard also applies to alcohol interlocks integrated into other control systems of the vehicle. This European Standard does not apply to - alcohol interlocks intended for general preventive use (see EN 50436-2), - instruments measuring the alcohol concentration in the ambient air in the vehicle, - alcohol interlocks not having a mouthpiece, - methods of installation and connections to the vehicle.

Keel en

Asendab EVS-EN 50436-1:2005; EVS-EN 50436-1:2005/AC:2009

### **prEN 50436-2**

Identne prEN 50436-2:2012

Tähtaeg 29.08.2012

#### **Alcohol interlocks - Test methods and performance requirements - Part 2: Instruments having a mouthpiece and measuring breath alcohol for general preventive use**

This European Standard specifies test methods and performance requirements for breath alcohol controlled alcohol interlocks having a mouthpiece. It covers alcohol interlocks intended for general preventive use. This European Standard is directed at test laboratories and manufacturers of alcohol interlocks. It defines requirements and test procedures for type approval. Several parameters (for example alcohol concentration or breath volume) are specified in this European Standard for the purpose of type testing according to this standard only. However, it may be necessary due to national regulations or depending on user requests to set the values of the prescribed parameters differently when the alcohol interlocks are in use. This European Standard also applies to alcohol interlocks integrated into other systems of the vehicle. This European Standard does not apply to - alcohol interlocks intended for use in traffic safety programmes for drink driving offenders (see EN 50436-1), - instruments measuring the alcohol concentration in the ambient air in the vehicle, - alcohol interlocks not having a mouthpiece, - methods of installation and connections to the vehicle.

Keel en

Asendab EVS-EN 50436-2:2008; EVS-EN 50436-2:2008/AC:2009

## **45 RAUDTEETEHNIKA**

### KAVANDITE ARVAMUSKÜSITLUS

#### **FprEN 15654-1**

Identne FprEN 15654-1:2012

Tähtaeg 29.08.2012

#### **Railway applications - Measurement of wheel and axle loads - Part 1: Interoperable 'in-service' rail vehicles**

The scope of this European Standard is restricted to evaluation of estimated static values for wheel forces on vehicles in service operation. Derived quantities can be: - axle loads; - side to side load differences of a wheel set, bogie, vehicle or train set; - overall weight of vehicle or train set; - mean axle load of a vehicle or train set. This standard is not concerned with the evaluation of: - dynamic wheel force or derived quantities; - wheel condition (i. e. shape, profile, flats); - lateral wheel force; - combination of lateral and vertical wheel forces. The standard defines accuracy classes for measurements to be made at any speed within the calibrated range, which may be up to line speed.

Keel en

#### **prEN 13796-1**

Identne prEN 13796-1:2012

Tähtaeg 29.08.2012

#### **Ohutusnõuded reisijateveoks kõisraudteel.**

#### **Kandurid. Osa 1: Haaratsid, karabiinid, toolid, T-latid ja platvormid**

This European Standard specifies the safety requirements applicable to carriers for cableway installations designed to carry persons. It is applicable to the various types of installations and takes into account their environment. It includes requirements relating to the prevention of accidents and the protection of workers. It does not apply to installations for the transportation of goods or to inclined lifts.

Keel en

Asendab EVS-EN 13796-1:2005

#### **prEN 16451**

Identne prEN 16451:2012

Tähtaeg 29.08.2012

#### **Railway applications - Braking - Brake pad holder**

The requirements contained in this European Standard apply to the brake pad holders with which the rail vehicles of main-line railways, private railways (regional railways, company railways) are fitted. Brake pad holders pursuant to this standard could be produced from cast iron, cast steel or forged steel. Brake pad holders made of non-ferrous materials are not subject of this standard.

Keel en

## 47 LAEVAEHITUS JA MERE-EHITISED

### KAVANDITE ARVAMUSKÜSITLUS

#### **FprEN 61996-1**

Identne FprEN 61996-1:2012

ja identne IEC 61996-1:201X

Tähtaeg 29.08.2012

#### **Maritime navigation and radiocommunication equipment and systems - Shipborne voyage data recorder (VDR) - Part 1: Voyage data recorder (VDR) - Performance requirements, methods of testing and required test results**

This part of IEC 61996 specifies the minimum performance requirements, technical characteristics and methods of testing, and required test results, for shipborne voyage data recorder (VDR) installations as required by Chapter V of the International Convention for Safety of Life at Sea (SOLAS), as amended. It takes account of IMO resolution A.694(17) and is associated with IEC 60945. When a requirement in this standard is different from IEC 60945, the requirement in this standard takes precedence. This standard incorporates the applicable parts of the performance standards included in IMO Resolution MSC.333(90). NOTE All text of this standard, whose wording is identical to that of IMO Resolution MSC.333(90), is printed in italics, and the Resolution and associated performance standard paragraph numbers are indicated in brackets.

Keel en

Asendab EVS-EN 61996-1:2008

## 49 LENNUNDUS JA KOSMOSETEHNIKA

### UUED STANDARDID JA PUBLIKATSIOONID

#### **EVS-EN 4644-001:2012**

Hind 22,15

Identne EN 4644-001:2012

#### **Aerospace series - Connector, electrical and optical, rectangular, modular, rectangular inserts, operating temperature 175 °C (or 125 °C) continuous - Part 001: Technical specification**

This European Standard specifies the required characteristics, the condition for qualification, acceptance and quality assurance for electrical and optical rectangular connectors with single or multiple removable rectangular inserts for use in a temperature range from – 65 °C to 175 °C continuous for electrical contact. This family of connectors is particularly suitable for aeronautic use in zones of severe environmental conditions on board aircraft, applying EN 2282. Inserts for fiber optic contacts or mixing fiber optic contacts and electrical contacts are described in EN 4639-002.

Keel en

#### **EVS-EN 4644-002:2012**

Hind 12,51

Identne EN 4644-002:2012

#### **Aerospace series - Connector, electrical and optical, rectangular, modular, rectangular inserts, operating temperature 175 °C (or 125 °C) continuous - Part 002: Specification of performance and contact arrangements**

This European Standard specifies the common conditions for rectangular electrical modular connectors for receptacles and plugs with interchangeable modules and a continuous operating temperature of 175 °C (or 125 °C). Contact arrangements for fibre optic contacts are described in EN 4639-002.

Keel en

#### **EVS-EN 4644-142:2012**

Hind 7,38

Identne EN 4644-142:2012

#### **Aerospace series - Connector, electrical and optical, rectangular, modular, rectangular inserts, operating temperature 175 °C (or 125 °C) continuous - Part 142: Size 4 receptacle for rack and panel application - Product standard**

This European Standard specifies the size 4 receptacle for rack and panel application used in the family of modular rectangular electrical and optical connector with rectangular inserts, operating temperature 175 °C (or 125 °C) continuous. The plug corresponding to this receptacle is defined in EN 4644-141.

Keel en

## 53 TÖSTE- JA TEISALDUS-SEADMED

### UUED STANDARDID JA PUBLIKATSIOONID

#### **EVS-EN 1554:2012**

Hind 8,72

Identne EN 1554:2012

#### **Konveierilindid. Trumli hõõrdejõu teimimine**

This European Standard describes a method of test to determine the propensity of a conveyor belt to generate heat flame or glow when held stationary under a given tension, in surface contact around a rotating driven steel drum. Means of varying the belt tension are described. NOTE For certain belt types, due to their construction, it may not be possible to conduct this test due to the inability of the belt to comply with the requirements of 6.2.3.

Keel en

Asendab EVS-EN 1554:2000

### ASENDATUD VÕI TÜHISTATUD STANDARDID

#### **EVS-EN 1554:2000**

Identne EN 1554:1998

#### **Konveierilindid. Trumli hõõrdejõu teimimine**

See standard kirjeldab teimimeetodit, millega määratakse kindlaks konveierilindi kalduvust tekitada kuuma leeki või hõõguda, kui linti hoida kogu vedava terastrumli kontaktpinna ulatuses pideva etteantud pinge all.

Keel en

Asendatud EVS-EN 1554:2012

## **KAVANDITE ARVAMUSKÜSITLUS**

### **FprEN ISO 1120**

Identne FprEN ISO 1120:2012  
ja identne ISO/FDIS 1120:2012  
Tähtaeg 29.08.2012

### **Conveyor belts - Determination of strength of mechanical fastenings - Static test method (ISO/FDIS 1120:2012)**

This International Standard specifies a static test method for measuring the strength of a conveyor belt mechanical fastening; the mechanical joints can be either of the type employing a connecting rod or of a type which does not employ a connecting rod. This International Standard does not cover vulcanized joints. This International Standard is neither applicable to nor valid for light conveyor belts, as described in ISO 21183-1. NOTE The purpose of the test specified in this International Standard is to eliminate mechanical fastenings of insufficient static strength. It is intended to establish a dynamic test at a later date.

Keel en

Asendab EVS-EN 1120:1999

## **65 PÖLLUMAJANDUS**

### **UUED STANDARDID JA PUBLIKATSIOONID**

#### **EVS-EN ISO 6498:2012**

Hind 17,08  
Identne EN ISO 6498:2012  
ja identne ISO 6498:2012

#### **Loomasööt. Proovide ettevalmistamise juhendid (ISO 6498:2012)**

This International Standard specifies guidelines for the preparation of test samples from laboratory samples of animal feeding stuffs, including pet foods. NOTE 1 The guidelines mostly derive from those developed by AAFCO (see Reference [7]). The guidelines are overruled by special instructions and regulations for sample preparation demanded by specific analysis methods. NOTE 2 Such analysis methods are developed by ISO and CEN. NOTE 3 This International Standard does not include special guidelines for sample preparation for microbiological analysis of microorganisms like yeasts, bacteria and moulds. Nonetheless, for microorganisms which are used as feed additives (probiotics), some important aspects of sample preparation are addressed.

Keel en

## **KAVANDITE ARVAMUSKÜSITLUS**

### **EN ISO 10517:2009/prA1**

Identne EN ISO 10517:2009/prA1:2012  
ja identne ISO 10519:2009/DAM 1:2012  
Tähtaeg 29.08.2012

### **Käeshoitavad mootoriga hekitrimmerid. Ohutus (ISO 10519:2009/DAM 1:2012)**

This International Standard specifies safety requirements and their verification for the design and construction of hand-held, integrally-driven petrol combustion engine hedge trimmers, hereafter referred to as "hedge trimmers", designed to be used by a single operator for trimming hedges and bushes while utilizing one or more linear reciprocating cutter blades. It establishes methods for the elimination or reduction of hazards arising from the use of the trimmers. In addition, it specifies the type of information to be provided by the manufacturer on safe working practices. This International Standard deals with all significant hazards, hazardous situations and events relevant to hand-held powered hedge trimmers when they are used as intended (see Clause 4). This International Standard does not deal with low noise design. It is not applicable to hedge trimmers with an engine displacement over 80 cm<sup>3</sup>, nor is it applicable to hedge trimmers manufactured before the date of its publication.

Keel en

Asendab EVS-EN ISO 10517:2009

#### **prEN 13368-1**

Identne prEN 13368-1:2012  
Tähtaeg 29.08.2012

#### **Fertilizers - Determination of chelating agents in fertilizers by chromatography - Part 1: Determination of EDTA, HEEDTA and DTPA by ion chromatography**

This document specifies a method for the chromatographic determination of the total amount of each of the individual chelating agents EDTA, HEEDTA, and DTPA in fertilizers containing one or more of these substances. The method allows the identification and the determination of the total water soluble fraction of each of these chelating agents. It does not allow to distinguish between the free form and the metal bound form of the chelating agents. NOTE EDTA, HEEDTA and DTPA are abbreviations used in the standard for the sake of simplicity. For complete names see Annex A. This method applies to fertilizers containing chelates of one or more of the following micro-nutrients: cobalt, copper, iron, manganese, zinc and with a mass fraction of at least 0,1 %.

Keel en

Asendab EVS-EN 13368-1:2001

## 67 TOIDUAINETE TEHNOLOOGIA

### KAVANDITE ARVAMUSKÜSITLUS

#### **prEN 1674**

Identne prEN 1674 rev:2012

Tähtaeg 29.08.2012

#### **Food processing machinery - Dough sheeters - Safety and hygiene requirements**

This standard specifies safety and hygiene requirements for the design and manufacture of dough sheeters used in the food industry and shops (bread-making, pastry-making, sweet industries, bakeries, confectioners, delicatessens, catering facilities, etc.) for reducing the thickness of a solid mass of dough or pastry by rolling it out. The operation is generally carried out by passing the dough back and forth between the rollers whose distance apart is reduced progressively either by manual adjustment or automatically. The standard covers the technical safety requirements for the transport, installation, adjustment, operation, cleaning and maintenance of these machines. This standard deals with all significant hazards, hazardous situations and events relevant to dough sheeters, when they are used as intended and under conditions of misuse which are reasonably foreseeable by the manufacturer (see Clause 5). Noise is not considered to be a significant hazard. This does not mean that the manufacturer is absolved from reducing noise and making a noise declaration. Therefore a noise test code is given in Annex B. The following machines are excluded: - experimental and testing machines under development by the manufacturer; - domestic appliances<sup>1</sup> This standard is not applicable to dough sheeters which are manufactured before the date of its publication as EN.

Keel en

Asendab EVS-EN 1674:2000+A1:2010

#### **prEN 12873-1**

Identne prEN 12873-1:2012

Tähtaeg 29.08.2012

#### **Influence of materials on water intended for human consumption - Influence due to migration - Part 1: Test method for factory-made products made from or incorporating organic or glassy (porcelain/vitreous enamel) materials**

This part of EN 12873 specifies a procedure to determine the migration of substances from factory-made or factory-applied products for use in contact with water intended for human consumption. Materials used to make such products include plastics, rubber and glassy (porcelain/vitreous enamel) materials. This part of EN 12873 is applicable to products intended to be used under various conditions for the transport and storage of water intended for human consumption, including raw water used for the production of water intended for human consumption. It covers the extraction by water of substances from the finished products.

Keel en

Asendab EVS-EN 12873-1:2004

#### **prEN 15768**

Identne prEN 15768:2012

Tähtaeg 29.08.2012

#### **GC-MS identification of water leachable organic substances from materials in contact with water intended for human consumption**

This European Standard describes a method for identifying organic chemicals that are amenable to GC-MS analysis using the procedures described and which may migrate from a product into water intended for human consumption. A method of semi-quantitatively estimating the concentrations of the organic substances identified is also provided. NOTE The method to be used for the preparation of migration waters is specified by separate EN standards, as noted below.

Keel en

#### **prEN 16453**

Identne prEN 16453:2012

Tähtaeg 29.08.2012

#### **Pulp, paper and paperboard - Determination of phthalates in extracts from paper and paperboard**

This European Standard specifies an analytical test method for the determination of phthalates in water, solvent and modified polyphenylene oxide (MPPO) extracts of paper and board materials and articles intended for food contact using gas chromatography coupled to mass spectrometry (GC-MS). This method is applicable to the determination of phthalates in concentration ranging from 0,002 mg/l to 5 mg/l for water and solvent extracts and 0,0005 mg/dm<sup>2</sup> to 0,25 mg/dm<sup>2</sup> for MPPO migration depending on the individual substance and the value of the blank.

Keel en

#### **prEVS-ISO 24557:2012**

ja identne ISO 24557:2009

Tähtaeg 29.08.2012

#### **Kaunviljad. Niiskusesisalduse määramine. Öhkkuivatuse meetod. (ISO 24557:2009)**

Rahvusvaheline standard käsitleb rutiinset referentsmeetodit kaunviljade niiskusesisalduse määramiseks. Meetodika on kasutatav kikerherneste, läätsede, herneste ja kõigi oaliikide puhul, välja arvatud sojaoad. MÄRKUS: Meetodika põhineb AACC heakskiidetud meetodil 44-17 [4].

Keel et

### UUED STANDARDID JA PUBLIKATSIOONID

#### **EVS-EN 61010-2-033:2012**

Hind 13,92

Identne EN 61010-2-033:2012

ja identne IEC 61010-2-033:2012

**Safety requirements for electrical equipment for measurement, control, and laboratory use - Part 2-033: Particular requirements for hand-held multimeters and other hand-held meters, for domestic and professional use, capable of measuring mains voltage**

This part of IEC 61010 specifies safety requirements for METERS. The METERS that have a primary purpose of measuring voltage on a live MAINS CIRCUIT are within the scope of this standard. They have various names, but all of them have capability for measurements of voltages on a live MAINS CIRCUIT. Some of the names given to this equipment are as follows: - MULTIMETER; - digital MULTIMETER; - VOLTMETER; - clamp METER (see also Part 2-032). For the purpose of this standard, the term METER is used for these HAND-HELD measuring instruments.

Keel en

#### **EVS-EN ISO 24443:2012**

Hind 13,92

Identne EN ISO 24443:2012

ja identne ISO 24443:2012

**Determination of sunscreen UVA photoprotection in vitro (ISO 24443:2012)**

This International Standard specifies an in vitro procedure to characterize the UVA protection of sunscreen products. Specifications are given to enable determination of the spectral absorbance characteristics of UVA protection in a reproducible manner. In order to determine relevant UVA protection parameters, the method has been created to provide a UV spectral absorbance curve from which a number of calculations and evaluations can be undertaken. Results from this measurement procedure can be used for other computations, as required by local regulatory authorities. These include calculation of the Ultraviolet-A protection factor (UVAPF) [correlating with in vivo UVAPF from the persistent pigment darkening (PPD) testing procedure], critical wavelength and UVA absorbance proportionality. These computations are optional and relate to local sunscreen product labelling requirements. This method relies on the use of in vivo SPF results for scaling the UV absorbance curve. This International Standard is not applicable to powder products such as pressed powder and loose powder products.

Keel en

### KAVANDITE ARVAMUSKÜSITLUS

#### **prEN 13697**

Identne prEN 13697:2012

Tähtaeg 29.08.2012

**Chemical disinfectants and antiseptics - Quantitative non-porous surface test for the evaluation of bactericidal and/or fungicidal activity of chemical disinfectants used in food, industrial, domestic and institutional areas - Test method and requirements without mechanical action (phase 2, step 2)**

This European Standard specifies a test method (phase 2/step 2) and the minimum requirements for bactericidal and/or fungicidal or yeasticidal activity of chemical disinfectants that form a homogeneous physically stable preparation in hard water or – in the case of ready-to-use products– with water in food, industrial, domestic and institutional areas, excluding areas and situations where disinfection is medically indicated and excluding products used on living tissues.

Keel en

Asendab EVS-EN 13697:2002

#### **prEN 15768**

Identne prEN 15768:2012

Tähtaeg 29.08.2012

**GC-MS identification of water leachable organic substances from materials in contact with water intended for human consumption**

This European Standard describes a method for identifying organic chemicals that are amenable to GC-MS analysis using the procedures described and which may migrate from a product into water intended for human consumption. A method of semi-quantitatively estimating the concentrations of the organic substances identified is also provided. NOTE The method to be used for the preparation of migration waters is specified by separate EN standards, as noted below.

Keel en

## prEN 50436-1

Identne prEN 50436-1:2012

Tähtaeg 29.08.2012

### **Alcohol interlocks - Test methods and performance requirements - Part 1: Instruments for drink-driving-offender programs**

This European Standard specifies test methods and performance requirements for breath alcohol controlled alcohol interlocks. It covers alcohol interlocks intended to be used in programmes for drink driving offenders as well as in programmes monitored or controlled in a comparable way. This European Standard is directed at test laboratories and manufacturers of alcohol interlocks. It defines requirements and test procedures for type approval. Several parameters (such as alcohol concentration or breath volume) are specified in this European Standard for the purpose of type testing according to this European Standard only. However, it may be necessary due to national regulations or depending on user requests to set the values of the prescribed parameters differently when the alcohol interlocks are in use. This European Standard also applies to alcohol interlocks integrated into other control systems of the vehicle. This European Standard does not apply to - alcohol interlocks intended for general preventive use (see EN 50436-2), - instruments measuring the alcohol concentration in the ambient air in the vehicle, - alcohol interlocks not having a mouthpiece, - methods of installation and connections to the vehicle.

Keel en

Asendab EVS-EN 50436-1:2005; EVS-EN 50436-1:2005/AC:2009

## prEN 50436-2

Identne prEN 50436-2:2012

Tähtaeg 29.08.2012

### **Alcohol interlocks - Test methods and performance requirements - Part 2: Instruments having a mouthpiece and measuring breath alcohol for general preventive use**

This European Standard specifies test methods and performance requirements for breath alcohol controlled alcohol interlocks having a mouthpiece. It covers alcohol interlocks intended for general preventive use. This European Standard is directed at test laboratories and manufacturers of alcohol interlocks. It defines requirements and test procedures for type approval. Several parameters (for example alcohol concentration or breath volume) are specified in this European Standard for the purpose of type testing according to this standard only. However, it may be necessary due to national regulations or depending on user requests to set the values of the prescribed parameters differently when the alcohol interlocks are in use. This European Standard also applies to alcohol interlocks integrated into other systems of the vehicle. This European Standard does not apply to - alcohol interlocks intended for use in traffic safety programmes for drink driving offenders (see EN 50436-1), - instruments measuring the alcohol concentration in the ambient air in the vehicle, - alcohol interlocks not having a mouthpiece, - methods of installation and connections to the vehicle.

Keel en

Asendab EVS-EN 50436-2:2008; EVS-EN 50436-2:2008/AC:2009

## 75 NAFTA JA NAFTATEHNOLOOGIA

### UUED STANDARDID JA PUBLIKATSIOONID

#### **EVS-EN 228/NA:2009/AC:2012**

Hind 0

#### **Mootorikütused. Pliivaba mootoribensiin. Nõuded ja katsemeetodid. Eesti standardi rahvuslik lisa**

Standardi EVS-EN 228/NA:2009 eestikeelse versiooni parandus.

Keel et

#### **EVS-EN 590:2009+A1:2010+NA:2009/AC:2012**

Hind 0

#### **Mootorikütused. Diislikütus. Nõuded ja katsemeetodid**

Standardi EVS-EN 590:2009+A1:2010+NA:2009 eestikeelse versiooni parandus.

Keel et

#### **EVS-EN 13617-1:2012**

Hind 18

Identne EN 13617-1:2012

#### **Bensiinjaamad. Osa 1: Ohutusnõuded mõõtepumpade, tankurite ja kaugjuhtimisega pumpade valmistamisele ja jõudlusele**

This European Standard applies to metering pumps, dispensers and remote pumping units to be installed at petrol filling stations, designed to dispense liquid fuels into the tanks of motor vehicles, boats and light aircraft and into portable containers at flow rates up to 200 l min<sup>-1</sup>, and intended for use and storage at ambient temperatures between -20 °C and +40 °C. Measures in addition to those required by this European Standard may be required for use and storage at temperature outside this range. The need for and nature of additional requirements should be determined by the manufacturer, if necessary after consulting the client. This European Standard deals with all significant hazards, hazardous situations and events relevant to metering pumps, dispensers and remote pumping units, when they are used as intended and under the conditions foreseeable by the manufacturer (see Clause 4). This European Standard gives health and safety related requirements for the selection, construction and performance of the equipment. This European Standard does not deal with noise and with hazards related to transportation and installation. This European Standard does not include any requirements for metering performance. Vapour recovery efficiency rates are not considered within this European Standard. Fuels other than the ones of Explosion Group IIA are excluded from this European Standard. This European Standard is not applicable to metering pumps, dispensers and remote pumping units which are manufactured before the date of publication of this document by CEN. This European Standard does not apply to equipment for use with liquefied petroleum gas (LPG) or liquefied natural gas (LNG) or compressed natural gas (CNG).

Keel en

Asendab EVS-EN 13617-1:2004+A1:2009

#### **EVS-EN 14214:2008+A1:2009/NA:2010/AC:2012**

Hind 0

#### **Mootorikütused. Rasvhapete metüülestrid (FAME) diiselmootorite jaoks. Nõuded ja katsemeetodid. Eesti standardi rahvuslik lisa**

Standardi EVS-EN 14214:2008+A1:2009/NA:2010 eestikeelse versiooni parandus.

Keel et

## **EVS-ISO 6743-13:2012**

Hind 4,79

ja identne ISO 6743-13:2002

### **Määrdeained, tööstusõlid ja nendega seotud tooted (klass L). Klassifikatsioon. Osa 13: tüüp G (juhikud)**

See ISO 6743 osa kehtestab üksikasjaliku määratluse määrdeainete tüübile G (juhikute määrdeained).

Mainitud määrdeained kuuluvad klassi L (määrdeained, tööstusõlid ja nendega seotud tooted).

Seda ISO 6743 osa on soovituslik lugeda koos standardiga ISO 6743-99 (vt [2] kirjanduses).

Keel et,en

## **EVS-ISO 6743-2:2012**

Hind 4,15

ja identne ISO 6743-2:1981

### **Määrdeained, tööstusõlid ja nendega seotud tooted (klass L). Klassifikatsioon. Osa 2: tüüp F (spindlite laagerdused, tavalagerdused ja sidurid)**

See ISO 6743 osa kehtestab üksikasjaliku määratluse määrdeainete tüübile F (spindlite laagerdused, tavalagerdused ja sidurid), mis kuulub klassi L (määrdeained, tööstusõlid ja nendega seotud tooted).

Seda ISO 6743 osa on soovituslik lugeda koos standardiga ISO 6743-0.

Keel et,en

## **EVS-ISO 6743-11:2012**

Hind 4,15

ja identne ISO 6743-11:1990

### **Määrdeained, tööstusõlid ja nendega seotud tooted (klass L). Klassifikatsioon. Osa 11: tüüp P (pneumotööriistad)**

See ISO 6743 osa kehtestab üksikasjaliku määratluse määrdeainete tüübile P, pneumotööriistad ja pneumosüsteemides kasutatavad seadmed. Mainitud määrdeained kuuluvad klassi L (määrdeained, tööstusõlid ja nendega seotud tooted).

Klassifikatsioon määratleb vaid suruõhuga kokkupuutuvad määrdeained. Pneumotööriistadel või -seadmetel võib olla ka teisi määrdepunkte (nt laagerdused, hammasülekanded jne), mis ei ole kajastatud selles ISO 6743 osas.

Klassifikatsioon kehtib vaid tava käitus- ja keskkonnatingimustes. Kokkupuutel tavatute tingimustega, nt väga kõrge või väga madal temperatuur, tuleb konsulteerida seadme valmistajaga ja/või määrdeaine edasimüüjaga.

Seda ISO 6743 osa on soovituslik lugeda koos standardiga ISO 6743-0.

Keel et,en

## **ASENDATUD VÕI TÜHISTATUD STANDARDID**

### **EVS-EN 13617-1:2004+A1:2009**

Identne EN 13617-1:2004+A1:2009

#### **Bensiinijaamad. Osa 1: Ohutusnõuded mõõtepumpade, tankurite ja kaugjuhtimisega pumpade valmistamisele ja jõudlusele KONSOLIDEERITUD TEKST**

This European Standard applies to metering pumps, dispensers and remote pumping units to be installed at petrol filling stations, designed to dispense liquid fuels into the tanks of motor vehicles, boats and light aircraft and into portable containers at flow rates up to 200 l·min<sup>-1</sup>, and intended for use and storage at ambient temperatures between -20 °C and +40 °C.

Keel en

Asendab EVS-EN 13617-1:2004

Asendatud EVS-EN 13617-1:2012

## **KAVANDITE ARVAMUSKÜSITLUS**

### **FprEN 14274**

Identne FprEN 14274:2012

Tähtaeg 29.08.2012

#### **Automotive fuels - Assessment of petrol and diesel quality - Fuel quality monitoring system (FQMS)**

This European Standard describes a fuel quality monitoring system (FQMS) for assessing the quality of petrol and automotive diesel fuel placed on the market in any of the Member States within the European Community. European Directive 98/70/EC [1] requires that every separate nationally defined fuel grade should comply with one specification as defined in the Directive. Therefore, for each nationally defined fuel grade, there will be a corresponding European parent fuel grade. For instance, unleaded petrol grades placed on the market in Europe can be 91, 95, 98 RON petrol. See also the example discussed in 5.4.2. Some basic background ideas behind the FQMS are given in Annex A. Since the specifications for automotive fuels contain climatic related requirements, the FQMS is run twice a year, once during the winter period and once during the summer period. Information about the dates for the summer and winter periods in a specific country are defined in the country's national annex to EN 228 and EN 590. Fuel samples taken during transition periods shall not be included in the FQMS. For the purposes of this FQMS, grades of petrol that constitute less than 10% of the total amount of petrol placed on the market in any one country, and grades of automotive diesel fuels that constitute less than 10% of the total amount of automotive diesel fuel dispensed in any country may require separate handling as described in Clause 5 of this European Standard.

Keel en

Asendab EVS-EN 14274:2003

### **FprEN 14275**

Identne FprEN 14275:2012

Tähtaeg 29.08.2012

#### **Mootorikütused. Mootoribensiini ja diislikütuse kvaliteedi hindamine. Proovide võtmine kütusepumpadest ja tankuritest**

This European Standard specifies a procedure for drawing, from fuel dispensers, samples of unleaded petrol and diesel fuel to be used for the assessment of automotive fuel quality in accordance with EN 14274. This European Standard does not cover the sampling of Liquefied Petroleum Gas (LPG). WARNING: The use of this standard may involve hazardous materials, operations and equipment. This standard does not purport to address all of the safety problems associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

Keel en

Asendab EVS-EN 14275:2003



## prEN ISO 22854

Identne prEN ISO 22854 rev:2012

ja identne ISO/DIS 22854:2012

Tähtaeg 29.08.2012

### **Liquid petroleum products - Determination of hydrocarbon types and oxygenates in automotive-motor gasoline - Multidimensional gas chromatography method (ISO/DIS 22854:2012)**

This International Standard specifies the gas chromatographic (GC) method for the determination of saturated, olefinic and aromatic hydrocarbons in automotive motor gasoline. Additionally, the benzene content, oxygenate compounds and the total oxygen content can be determined. This method defines two procedures, A and B. Procedure A is applicable to automotive motor gasoline with a total volume fraction of aromatics of up to 50 %; a total volume fraction of olefins from about 1,5 % up to 30 %; a volume fraction of oxygenates, from 0,8 % up to 15 %; a total mass fraction of oxygen from about 1,5 % to about 3,7 %; and a volume fraction of benzene of up to 2 %. Although this test method can be used to determine higher-olefin contents of up to 50% (V/V), the precision for olefins was tested only in the range from about 1,5 % (V/V) to about 30% (V/V). Although specifically developed for the analysis of automotive motor gasoline that contains oxygenates, this test method can also be applied to other hydrocarbon streams having similar boiling ranges, such as naphthas and reformates. Procedure B describes the procedure for the analysis of oxygenated groups in (automotive) ethanol fuels containing an ethanol volume fraction between 50 % and 85 %. The gasoline is diluted with an oxygenate-free component to lower the ethanol content to a value below 20 % before the analysis by GC.

Keel en

Asendab EVS-EN ISO 22854:2008

## 77 METALLURGIA

### **UUED STANDARDID JA PUBLIKATSIOONID**

#### **EVS-EN 12258-1:2012**

Hind 27,7

Identne EN 12258-1:2012

#### **Alumiinium ja alumiiniumisulamid. Tingimused ja määratlused. Osa 1: Üldterminid**

This European Standard defines general terms relating to products of aluminium and aluminium alloys which are helpful for communication within the aluminium industry and with its customers. It includes terms dealing with aluminium products, processing, sampling and testing, product characteristics and different types of visual quality characteristics. It does not include terms dealing with bauxite mining, alumina and anode production and aluminium smelting. This European Standard tries to adhere as closely as possible to the terms and definitions used in other standards or documents.

Keel en

Asendab EVS-EN 12258-1:1999

## **ASENDATUD VÕI TÜHISTATUD STANDARDID**

#### **EVS-EN 12258-1:1999**

Identne EN 12258-1:1998

#### **Alumiinium ja alumiiniumisulamid. Tingimused ja määratlused. Osa 1: Üldterminid**

See Euroopa standard määrab kindlaks üldterminid, mis hõlbustavad alumiiniumitööstuse ja selle klientide suhtlust alumiiniumtoodete või alumiiniumisulamist toodetega seotud küsimustes.

Keel en

Asendatud EVS-EN 12258-1:2012

#### **EVS-EN ISO 12737:2010**

Identne EN ISO 12737:2010

ja identne ISO 12737:2010

#### **Metallic materials - Determination of plane-strain fracture toughness (ISO 12737:2010)**

This International Standard specifies the ISO method for determining the plane-strain fracture toughness of homogeneous metallic materials using a specimen that is notched and precracked by fatigue, and subjected to slowly increasing crack displacement force.

Keel en

Asendab EVS-EN ISO 12737:2005

## **KAVANDITE ARVAMUSKÜSITLUS**

#### **FprEN ISO 5755**

Identne FprEN ISO 5755:2012

ja identne ISO/FDIS 5755:2012

Tähtaeg 29.08.2012

#### **Sintered metal materials - Specifications (ISO/FDIS 5755:2012)**

This International Standard specifies the requirements for the chemical composition and the mechanical and physical properties of sintered metal materials used for bearings and structural parts. When selecting powder metallurgical (PM) materials, it should be taken into account that the properties depend not only on the chemical composition and density, but also on the production methods. The properties of sintered materials giving satisfactory service in particular applications may not necessarily be the same as those of wrought or cast materials that might otherwise be used. Therefore, liaison with prospective suppliers is recommended.

Keel en

## 79 PUIDUTEHNOLOOGIA

### **KAVANDITE ARVAMUSKÜSITLUS**

#### **EN 14081-2:2010/FprA1**

Identne EN 14081-2:2010/FprA1:2012

Tähtaeg 29.08.2012

#### **Timber structures - Strength graded structural timber with rectangular cross section - Part 2: Machine grading - Additional requirements for initial type testing**

See Euroopa standard määrab kindlaks, lisaks standardis EN 14081-1 antule, esmaste tüübikatsetuste nõuded saagimisel, hõõveldamisel või muul meetodil töödeldud nelinurkse ristlõikega masinsorditud ehituspuidule, mille mõõtmete hälbed sihtmõõtmetest vastavad standardile EN 336. See sisaldab nõudeid sortimismasinatele ja katseseadmetele sorditud materjali katsekoormamiseks.

Keel en

## FprEN 12750

Identne FprEN 12750:2012

Tähtaeg 29.08.2012

### **Puidutöötlemismasinatate ohutus. Neljakandilised vormimismasinad**

This European Standard deals with all significant hazards, hazardous situations and events as listed in Clause 4, which are relevant to stationary four sided moulding machines with a maximum working width of 350 mm and a maximum speed of the integrated work-piece feed of 200 m/min, with electrical and/or electronic control system, hereafter referred to as "machines" designed to cut solid wood, chipboard, fibreboard, plywood and also these materials where these are covered with plastic laminate or edgings when they are used as intended and under the conditions foreseen by the manufacturer, including reasonably foreseeable misuse of the machine (see 6.3 c)). For the definition of a stationary machine, see 3.22. This European Standard deals also with hazards relating to the following optional work units: - universal spindle; - glass bead cutting unit. This European Standard is not applicable to machines designed for machining logs which have not previously been machined. This European Standard does not deal with any hazards relating to: a) in-feed devices (magazines, hoppers, etc.); for mechanical in-feed devices which also prevent access to the in-feed opening, see 5.3.7.2; b) the combination of single machines with any other machine as part of a line; c) out-feed devices (e.g. mechanical handling systems) except for hazards related to ejection from the machine due to climb cutting. This European Standard is not applicable to four sided moulding machines which are manufactured before the date of its publication as EN.

Keel en

Asendab EVS-EN 12750:2001+A1:2009

## prEN 16449

Identne prEN 16449:2012

Tähtaeg 29.08.2012

### **Wood and wood-based products - Calculation of sequestration of atmospheric carbon dioxide**

This standard provides a simple calculation method for estimation of the amount of carbon dioxide sequestered by the growing tree which is then stored as biogenic carbon in wood products until end of life.

Keel en

## 81 KLAASI- JA KERAAMIKA-TÖÖSTUS

### **KAVANDITE ARVAMUSKÜSITLUS**

#### **prEN 15682-1**

Identne prEN 15682-1:2012

Tähtaeg 29.08.2012

#### **Glass in building - Heat soaked thermally toughened alkaline earth silicate safety glass - Part 1: Definition and description**

This part of EN 15682 specifies the heat soak process system together with tolerances flatness, edgework, fragmentation and physical and mechanical characteristics of monolithic flat heat soaked thermally toughened alkaline earth silicate safety glass for use in buildings. Information on curved heat soak thermally toughened alkaline earth silicate safety glass is given in Annex B, but this product does not form part of this document. Other requirements, not specified in this document, can apply to heat soaked thermally toughened alkaline earth silicate safety glass which is incorporated into assemblies, e.g. laminated glass or insulating units, or undergo an additional treatment, e.g. coating. The additional requirements are specified in the appropriate product standard prEN 15682-2:2012. Heat soak thermally toughened alkaline earth silicate safety glass, in this case, does not lose its mechanical or thermal characteristics.

Keel en

#### **prEN 15682-2**

Identne prEN 15682-2:2012

Tähtaeg 29.08.2012

#### **Glass in building - Heat soaked thermally toughened alkaline earth silicate safety glass - Part 2: Evaluation of conformity/Product standard**

This part of EN 15682 specifies requirements, the evaluation of conformity and the factory production control of flat heat soaked thermally toughened alkaline earth silicate safety glass for use in buildings.

Keel en

#### **prEN 15683-1**

Identne prEN 15683-1:2012

Tähtaeg 29.08.2012

#### **Glass in building - Thermally toughened soda lime silicate channel shaped safety glass - Part 1: Definition and description**

This part of EN 15683 specifies tolerances, flatness of web and flanges, flange deviation, edgework, fragmentation and physical and mechanical characteristics of monolithic thermally toughened soda lime silicate channel shaped safety glass for use in buildings. Other requirements, not specified in this document, can apply to thermally toughened soda lime silicate channel shaped safety glass, which undergoes an additional treatment, e.g. coating. The additional requirements are specified in the appropriate product standard prEN 15683-2:2012. Thermally toughened soda lime silicate channel shaped safety glass, in this case, does not lose its mechanical or thermal characteristics.

Keel en

### **prEN 15683-2**

Identne prEN 15683-2:2012

Tähtaeg 29.08.2012

#### **Glass in building - Thermally toughened soda lime silicate channel shaped safety glass - Part 2: Evaluation of conformity/Product standard**

This part of EN 15683 covers the evaluation of conformity and the factory production control of thermally toughened soda lime silicate channel shaped safety glass for use in buildings. This also includes requirements subject to regulation.

Keel en

## **83 KUMMI- JA PLASTITÖÖSTUS**

### **KAVANDITE ARVAMUSKÜSITLUS**

#### **EN 438-9:2010/prA1**

Identne EN 438-9:2010/prA1:2012

Tähtaeg 29.08.2012

#### **High-pressure decorative laminates (HPL) - Sheets based on thermosetting resins (usually called laminates) - Part 9 : Classification and specifications for alternative core laminates**

This European Standard specifies performance requirements for high-pressure decorative laminates (HPL) intended for interior use, the core compositions of which are not covered by EN 438-3 [1] to EN 438-6 [4] and EN 438-8 [5]. The core composition types (coloured core and metal reinforced core) are defined in this part of EN 438. EN 438-2 specifies the test methods relevant to this part of EN 438.

Keel en

#### **FprEN ISO 294-5**

Identne FprEN ISO 294-5:2012

ja identne ISO 294-5:2011

Tähtaeg 29.08.2012

#### **Plastics - Injection moulding of test specimens of thermoplastic materials - Part 5: Preparation of standard specimens for investigating anisotropy (ISO 294-5:2011)**

This part of ISO 29463 specifies the reference test procedure for determining the efficiency of filters at their most penetrating particle size (MPPS). It also gives guidelines for the testing and classification for filters with an MPPS of less than 0,1 µm (Annex B) and filters using media with (charged) synthetic fibres (Annex C). It is intended for use in conjunction with ISO 29463-1, ISO 29463-2, ISO 29463-3 and ISO 29463-4.

Keel EN

#### **FprEN ISO 11357-3**

Identne FprEN ISO 11357-3:2012

ja identne ISO 11357-3:2011

Tähtaeg 29.08.2012

#### **Plastics - Differential scanning calorimetry (DSC) - Part 3: Determination of temperature and enthalpy of melting and crystallization (ISO 11357-3:2011)**

This part of ISO 11357 specifies a method for the determination of the temperatures and enthalpies of melting and crystallization of crystalline or partially crystalline plastics.

Keel en

#### **FprEN ISO 11357-4**

Identne FprEN ISO 11357-4:2012

ja identne ISO 11357-4:2005

Tähtaeg 29.08.2012

#### **Plastics - Differential scanning calorimetry (DSC) - Part 4: Determination of specific heat capacity (ISO 11357-4:2005)**

This part of ISO 11357 specifies methods for determining the specific heat capacity of plastics by differential scanning calorimetry.

Keel en

#### **FprEN ISO 11357-6**

Identne FprEN ISO 11357-6:2012

ja identne ISO 11357-6:2008

Tähtaeg 29.08.2012

#### **Plastics - Differential scanning calorimetry (DSC) - Part 6: Determination of oxidation induction time (isothermal OIT) and oxidation induction temperature (dynamic OIT) (ISO 11357-6:2008)**

This part of ISO 11357 specifies methods for the determination of oxidation induction time (isothermal OIT) and oxidation induction temperature (dynamic OIT) of polymeric materials by means of differential scanning calorimetry (DSC). It is applicable to polyolefin resins that are in a fully stabilized or compounded form, either as raw materials or finished products. It may be applicable to other plastics.

Keel en

#### **FprEN ISO 11357-7**

Identne FprEN ISO 11357-7:2012

ja identne ISO 11357-7:2002

Tähtaeg 29.08.2012

#### **Plastics - Differential scanning calorimetry (DSC) - Part 7: Determination of crystallization kinetics (ISO 11357-7:2002)**

This part of ISO 11357 specifies two methods, isothermal and non-isothermal, for studying the crystallization kinetics of partially crystalline polymers using differential scanning calorimetry (DSC). It is only applicable to melted polymers. NOTE These methods are not suitable if the molecular structure of the polymer is modified during the test.

Keel en

**FprEN ISO 19712-1**

Identne FprEN ISO 19712-1:2012

ja identne ISO 19712-1:2008

Tähtaeg 29.08.2012

**Plastics - Decorative solid surfacing materials - Part 1: Classification and specifications (ISO 19712-1:2008)**

This part of ISO 19712 establishes a classification system for solid surfacing materials according to their performance. This part of ISO 19712 also specifies property requirements for the various types of solid surfacing materials covered by this classification. Requirements are specified for the types that are most generally used, but additional types may be added as required. The specified limit values apply to the most commonly used types of material, but within each classification it may be possible to obtain variants having much higher performance values. These materials are characterized by their homogeneous appearance, renewable surfaces and inconspicuous seams. They are generally classified as follows. a) Solid surface sheets Solid surfacing sheets are designed for horizontal, vertical, wet and dry applications. b) Solid surface shapes Solid surface shapes include, but are not limited to, kitchen sinks, bathroom sinks, vanity tops, showers, tubs and spas. The important properties of solid surfacing materials are - water resistance, - thermal shock resistance, - heat resistance, - impact resistance, - stain and chemical resistance, - cigarette burn resistance, - colour stability, - hardness, - bacterial and fungal resistance, - cleanability, - hygiene, - seamability, - renewability.

Keel en

**FprEN ISO 19712-2**

Identne FprEN ISO 19712-2:2012

ja identne ISO 19712-2:2007

Tähtaeg 29.08.2012

**Plastics - Decorative solid surfacing materials - Part 2: Determination of properties - Sheet goods (ISO 19712-2:2007)**

This part of ISO 19712 specifies the methods of test for determination of the properties of solid surfacing materials, as defined in Clause 3, in the form of sheets. These methods are primarily intended for testing the materials specified in ISO 19712-1. The tests may be carried out on finished sheets, but are generally carried out on test specimens of a size sufficient to meet the requirements of the test, and of the same material and finish as the finished sheet.

Keel en

**FprEN ISO 19712-3**

Identne FprEN ISO 19712-3:2012

ja identne ISO 19712-3:2007

Tähtaeg 29.08.2012

**Plastics - Decorative solid surfacing materials - Part 3: Determination of properties - Solid surface shapes (ISO 19712-3:2007)**

This part of ISO 19712 specifies the methods of test for determination of the properties of solid surfacing materials, as defined in Clause 3, in the form of shaped products. These methods are primarily intended for testing the materials specified in ISO 19712-1. The tests may be carried out on finished products, but are generally carried out on test panels of a size sufficient to meet the requirements of the test, and of the same material and finish as the finished product.

Keel en

**prEN ISO 16396-1**

Identne prEN ISO 16396-1 rev:2012

ja identne ISO/DIS 16396-1:2012

Tähtaeg 29.08.2012

**Plastics - Polyamide (PA) moulding and extrusion materials - Part 1: Designation system, marking of products and basis for specification (ISO/DIS 16396-1:2012)**

This part of ISO 16396 establishes a system of designation for polyamide (PA) thermoplastic materials which is based on ISO 1043 and is intended to coordinate with the marking document ISO 11469. The designation system may be used as the basis for specifications. It covers Polyamide homopolymers, copolymers and blends of various compositions for moulding and extrusion. The types of polyamide plastics are differentiated from each other by a classification system based on appropriate levels of the designatory properties a) viscosity number, b) tensile modulus of elasticity and on information about chemical structure, method of processing, important properties, additives, colour, fillers and reinforcing materials The designation system is applicable to all polyamide homopolymers, copolymers and blends. It applies to materials ready for normal use, unmodified and modified by colorants, additives, fillers, reinforcing materials, polymer modifiers, etc. This part of ISO 16396 does not apply to monomer casting-type polyamides of PA6 and PA12. It is not intended to imply that materials having the same designation necessarily give the same performance. This part of ISO 16396 does not provide engineering data, performance data or data on processing conditions which may be required to specify a material for a particular application and/or method of processing. If such additional properties are required, they shall be determined in accordance with the test methods specified in part 2 of ISO 1874, if suitable. In order to specify a thermoplastic material for a particular application or reproducible processing, additional requirements shall be given in Data Block 5 (3.1, 3.6).

Keel en

Asendab EVS-EN ISO 1874-1:2010

## prEN ISO 17855-1

Identne prEN ISO 17855-1 rev:2012

ja identne ISO/DIS 17855-1:2012

Tähtaeg 29.08.2012

### **Plastid. Polüetüleenist (PE) vormimis- ja ekstrusioonimaterjalid. Osa 1: Tähistussüsteem ja alus tehniliste andmete jaoks (ISO/DIS 17855-1:2012)**

1.1 This part of ISO 17855 establishes a system of designation for polyethylene thermoplastic material, which may be used as the basis for specifications. 1.2 The types of polyethylene plastics are differentiated from each other by a classification system based on appropriate levels of the designatory properties a) density b) melt mass-flow rate and on information about the intended application and/or method of processing, important properties, additives, colorants, fillers and reinforcing materials. 1.3 This part of ISO 17855 is applicable to all polyethylene homopolymers and to copolymers of ethylene having a content of other 1-olefinic monomers of less than 50 % (m/m) and a content of non-olefinic monomers with functional groups up to a maximum of 3 % (m/m). It applies to materials ready for normal use in the form of powder, granules or pellets, unmodified or modified by colorants, additives, fillers, etc. This part of ISO 17855 does not apply to masterbatches or to EPM rubber. This part of ISO 17855 also does not apply to PE-UHMW. It should reference to ISO 11542-1 for PE-UHMW. 1.4 It is not intended to imply that materials having the same designation give necessarily the same performance. This part of ISO 17855 does not provide engineering data, performance data or data on processing conditions which may be required to specify a material for a particular application and/or method of processing. If such additional properties are required, they shall be determined in accordance with the test methods specified in ISO1872-2, if suitable. 1.5 In order to specify a thermoplastic material for a particular application or to ensure reproducible processing, additional requirements may be given in data block 5 (see clause 3, introductory paragraph).

Keel en

Asendab EVS-EN ISO 1872-1:2000

## 85 PABERITEHNOLOOGIA

### **KAVANDITE ARVAMUSKÜSITLUS**

#### **prEN 16453**

Identne prEN 16453:2012

Tähtaeg 29.08.2012

#### **Pulp, paper and paperboard - Determination of phthalates in extracts from paper and paperboard**

This European Standard specifies an analytical test method for the determination of phthalates in water, solvent and modified polyphenylene oxide (MPPO) extracts of paper and board materials and articles intended for food contact using gas chromatography coupled to mass spectrometry (GC-MS). This method is applicable to the determination of phthalates in concentration ranging from 0,002 mg/l to 5 mg/l for water and solvent extracts and 0,0005 mg/dm<sup>2</sup> to 0,25 mg/dm<sup>2</sup> for MPPO migration depending on the individual substance and the value of the blank.

Keel en

## 91 EHITUSMATERJALID JA EHITUS

### **UUED STANDARDID JA PUBLIKATSIOONID**

#### **EVS-EN 934-2:2009+A1:2012**

Hind 12,51

Identne EN 934-2:2009+A1:2012

#### **Betooni, mördi ja süstmördi keemilised lisandid. Osa 2: Betooni keemilised lisandid. Määratlused, nõuded, vastavus, tähistus ja sildistus KONSOLIDEERITUD TEKST**

This European Standard specifies definitions and requirements for admixtures for use in concrete. It covers admixtures for plain, reinforced and prestressed concrete which are used in site mixed, ready mixed concrete and precast concrete. The performance requirements in this standard apply to admixtures used in concrete of normal consistence. They may not be applicable to admixtures intended for other types of concrete such as semi-dry and earth moist mixes. Provisions governing the practical application of admixtures in the production of concrete, i.e. requirements concerning composition, mixing, placing, curing etc. of concrete containing admixtures are not part of this standard.

Keel en

Asendab EVS-EN 934-2:2009

#### **EVS-EN 16031:2012**

Hind 15,4

Identne EN 16031:2012

#### **Adjustable telescopic aluminium props - Product specifications, design and assessment by calculation and tests**

This European Standard specifies materials, design requirements and designation together with assessment methods using both calculations and testing for adjustable telescopic aluminium props which are intended for use on construction sites. It outlines eleven classes of nominal specified values for strengths for adjustable telescopic aluminium props, each having a series of maximum extended lengths.

Keel en

#### **EVS-EN 62561-1:2012**

Hind 12,51

Identne EN 62561-1:2012

ja identne IEC 62561-1:2012

#### **Lightning Protection System Components (LPSC) - Part 1: Requirements for connection components**

This part of IEC 62561 specifies the requirements and tests for metallic connection components that form part of a lightning protection system (LPS). Typically, these can be connectors, bonding and bridging components, expansion pieces and test joints. Testing of components for an explosive atmosphere is not covered by this standard.

Keel en

Asendab EVS-EN 50164-1:2008

## **EVS-EN 62561-2:2012**

Hind 15,4

Identne EN 62561-2:2012

ja identne IEC 62561-2:2012

### **Lightning Protection System Components (LPSC) - Part 2: Requirements for conductors and earth electrodes**

This part of IEC 62561 specifies the requirements and tests for: - metallic conductors (other than "natural" conductors) that form part of the air termination system and down conductors; - metallic earth electrodes that form part of the earth termination system.

Keel en

Asendab EVS-EN 50164-2:2008

## **EVS-EN 62561-3:2012**

Hind 11,67

Identne EN 62561-3:2012

ja identne IEC 62561-3:2012

### **Lightning Protection System Components (LPSC) - Part 3: Requirements for isolating spark gaps**

This part of IEC 62561 specifies the requirements and tests for isolating spark gaps (ISG) for lightning protection systems. ISGs can be used to indirectly bond a lightning protection system to other nearby metalwork where a direct bond is not permissible for functional reasons. Typical applications include the connection to: - earth termination systems of power installations; - earth termination systems of telecommunication systems; - auxiliary earth electrodes of voltage-operated, earth fault circuit breakers; - rail earth electrode of AC and DC railways; - measuring earth electrodes for laboratories; - installations with cathodic protection and stray current systems; - service entry masts for low-voltage overhead cables; - bypassing insulated flanges and insulated couplings of pipelines. This standard does not cover applications where follow currents occur. NOTE Lightning protection system components (LPSC) can also be suitable for use in hazardous conditions such as fire and explosive atmosphere. Due regard will be taken of the extra requirements necessary for the components to be installed in such conditions.

Keel en

Asendab EVS-EN 50164-3:2006; EVS-EN 50164-3:2006/A1:2009

## **ASENDATUD VÕI TÜHISTATUD STANDARDID**

### **EVS-EN 934-2:2009**

Identne EN 934-2:2009

#### **Betooni, mördi ja süstmördi keemilised lisandid. Osa 2: Betooni keemilised lisandid. Määratlused, nõuded, vastavus, tähistus ja sildistus**

Käesolev Euroopa standard spetsifitseerib betoonis kasutatavate keemiliste lisandite määratlused ja neile esitatavad nõuded. Standard hõlmab sarrustamata betooni, raudbetooni ja pingebetooni lisandeid, mida kasutatakse platsibetooni, kaubabetooni ja valmiselementide valmistamisel. Käesolevas standardis esitatavad toimivusnõuded kehtivad tavalise konsistentsiga betoonis kasutatavatele lisanditele. Need nõuded võivad teist tüüpi betoonides, nagu poolkuivad ja muldniisked segud, kasutatavatele lisanditele mitte rakenduda. Käesolev standard ei käsitle lisandite kasutamist betooni tootmisel, nt nõudeid lisandeid sisaldava betooni koostisele, segamisele, paigaldamisele, hooldamisele jne.

Keel et

Asendab EVS-EN 934-2:2002+A1:2004+A2:2006

Asendatud EVS-EN 934-2:2009+A1:2012

## **EVS-EN 50164-1:2008**

Identne EN 50164-1:2008

### **Lightning Protection Components (LPC) -- Part 1: Requirements for connection components**

This European Standard specifies the requirements and tests for metallic connection components that form part of a Lightning Protection System (LPS). Typically these can be connectors, bonding and bridging components, expansion pieces and test joints.

Keel en

Asendab EVS-EN 50164-1:2002; EVS-EN 50164-1:2002/A1:2008

Asendatud EVS-EN 62561-1:2012

## **EVS-EN 50164-2:2008**

Identne EN 50164-2:2008

### **Lightning protection components (LPC) -- Part 2: Requirements for conductors and earth electrodes**

This European Standard specifies the requirements and tests for – metallic conductors (other than "natural" conductors) that form part of the air termination system and down conductors, – metallic earth electrodes that form part of the earth termination system. Lightning protection components (LPC) may also be suitable for use in hazardous atmospheres. Regard should then be taken of the extra requirements necessary for the components to be installed in such conditions.

Keel en

Asendab EVS-EN 50164-2:2003; EVS-EN 50164-2:2003/A1:2006

Asendatud EVS-EN 62561-2:2012

## **EVS-EN 50164-3:2006**

Identne EN 50164-3:2006

### **Lightning Protection Components (LPC) - Part 3: Requirements for isolating spark gaps**

This European Standard specifies the requirements and tests for isolating spark gaps (ISG) for lightning protection systems. ISG's can be used to indirectly bond a lightning protection system to other nearby metalwork where a direct bond is not permissible for functional reasons.

Keel en

Asendatud EVS-EN 62561-3:2012

## **EVS-EN 50164-3:2006/A1:2009**

Identne EN 50164-3:2006/A1:2009

### **Lightning Protection Components (LPC) - Part 3: Requirements for isolating spark gaps**

This European Standard specifies the requirements and tests for isolating spark gaps (ISG) for lightning protection systems. ISG's can be used to indirectly bond a lightning protection system to other nearby metalwork where a direct bond is not permissible for functional reasons.

Keel en

Asendatud EVS-EN 62561-3:2012

## **KAVANDITE ARVAMUSKÜSITLUS**

### **EN 1744-1:2010/FprA1**

Identne EN 1744-1:2009/FprA1:2012

Tähtaeg 29.08.2012

#### **Täitematerjalide keemiliste omaduste katsetamine.**

##### **Osa 1: Keemiline analüüs**

Käesolev Euroopa standard määratleb täitematerjalide keemilise analüüsi meetodid. Standard määratleb põhimeetodid ja teatud juhtudel ka samaväärseid tulemusi andvad alternatiivmeetodid. Juhul kui pole teisiti määratud, võib käesolevas standardis esitatud meetodeid kasutada tootmiskontrolli eesmärkidel ja kontroll- või tüübikatsetusel. Käesolev standard kirjeldab põhimeetodeid, mida kasutatakse tüübikatsetusel ja erimeelsuste korral (ja alternatiivmeetodite puhul) täitematerjalide keemilisel analüüsil. Tüübikatsetusel ja erimeelsuste korral tuleks kasutada ainult põhimeetodit. Teistel eesmärkidel, peamiselt tehase tootmisohje puhul, võib teisi meetodeid kasutada eeldusel, et nende puhul on olemas asjakohane toimiv suhe põhimeetodiga.

Keel en

### **FprEN 822**

Identne FprEN 822:2012

Tähtaeg 29.08.2012

#### **Ehituses kasutatavad soojustusmaterjalid. Pikkuse ja laiuse määramine**

This European Standard specifies the equipment and procedures for determining the length and width of fullsize products. It is applicable to thermal insulating products.

Keel en

Asendab EVS-EN 822:1999

### **FprEN 823**

Identne FprEN 823:2012

Tähtaeg 29.08.2012

#### **Ehituses kasutatavad soojustusmaterjalid. Paksuse määramine**

This European Standard specifies the equipment and procedures for determining the thickness of full-size products. It is applicable to thermal insulating products.

Keel en

Asendab EVS-EN 823:1999

### **FprEN 824**

Identne FprEN 824:2012

Tähtaeg 29.08.2012

#### **Ehituses kasutatavad soojustusmaterjalid.**

##### **Täisnurksuse hindamine**

This European Standard specifies the equipment and procedure for determining the deviation from squareness for length, width and/or thickness of full-size products. It is applicable to thermal insulating products. The method is normally applicable to products with straight edges. For products of other shape, e.g. profiled edges, the method can be adapted accordingly.

Keel en

Asendab EVS-EN 824:1999

### **FprEN 825**

Identne FprEN 825:2012

Tähtaeg 29.08.2012

#### **Thermal insulating products for building applications - Determination of flatness**

This European Standard specifies the equipment and procedures for determining the deviation from flatness for full-size products. It is applicable to thermal insulating products.

Keel en

Asendab EVS-EN 825:1999

### **FprEN 826**

Identne FprEN 826:2012

Tähtaeg 29.08.2012

#### **Ehituses kasutatavad soojustusmaterjalid. Kokkusurutavuse hindamine**

This European Standard specifies the equipment and procedures to be used when determining the compression behaviour of test specimens. It is applicable to thermal insulating products and can be used to determine the compressive stress in compressive creep tests and for applications in which insulation products are only exposed to short-term loads. The method can be used for quality control purposes. It may also be employed to obtain reference values from which design values can be calculated using safety factors.

Keel en

Asendab EVS-EN 826:1999

### **FprEN 1602**

Identne FprEN 1602:2012

Tähtaeg 29.08.2012

#### **Ehituses kasutatavad soojustusmaterjalid. Näivtiheduse määramine**

This European Standard specifies the equipment and procedures for determining the apparent overall density and the apparent core density under reference conditions. It is applicable to full size thermal insulating products and test specimens. This standard can also be applied to the individual layers of multi-layered products.

Keel en

Asendab EVS-EN 1602:1999

### **FprEN 1603**

Identne FprEN 1603:2012

Tähtaeg 29.08.2012

#### **Ehituses kasutatavad soojustusmaterjalid. Mõõtmete püsivuse määramine labori konstantsetes normaaltingimustes (temperatuur 23 °C ja relatiivne niiskus 50%).**

This European Standard specifies the equipment and procedures to evaluate irreversible dimensional changes of test specimens and full size products with time under constant normal laboratory conditions. It is applicable to thermal insulating products.

Keel en

Asendab EVS-EN 1603:1999; EVS-EN 1603:1999/A1:2006

**FprEN 1604**

Identne FprEN 1604:2012

Tähtaeg 29.08.2012

**Ehituses kasutatavad soojustusmaterjalid. Mõõtmete püsivuse määramine kindlates temperatuuri- ja niiskusetingimustes**

This European Standard specifies the equipment and procedures for evaluating dimensional changes of test specimens under specified conditions of temperature, relative humidity and duration of exposure. This European Standard proposes a range of conditions from which one or more desirable test conditions can be selected. It is applicable to thermal insulating products.

Keel en

Asendab EVS-EN 1604:1999; EVS-EN 1604:1999/A1:2006

**FprEN 1605**

Identne FprEN 1605:2012

Tähtaeg 29.08.2012

**Ehituses kasutatavad soojustusmaterjalid. Deformatsiooni määramine kindlates survejõu- ja temperatuuritingimustes**

This European Standard specifies the equipment and procedures for determining the deformation occurring under specified conditions of compressive load, temperature and time. It is applicable to thermal insulating products.

Keel en

Asendab EVS-EN 1605:1999; EVS-EN 1605:1999/A1:2006

**FprEN 1606**

Identne FprEN 1606:2012

Tähtaeg 29.08.2012

**Ehituses kasutatavad soojustusmaterjalid. Surveroome määramine**

This European Standard specifies the equipment and procedures for determining the compressive creep of specimens under various conditions of stress. It is applicable to thermal insulating products.

Keel en

Asendab EVS-EN 1606:1999; EVS-EN 1606:1999/A1:2006

**FprEN 1607**

Identne FprEN 1607:2012

Tähtaeg 29.08.2012

**Ehituses kasutatavad soojustusmaterjalid. Tõmbetugevuse määramine ristil pealispinnaga**

This European Standard specifies the equipment and procedures for determining the tensile strength of a product perpendicular to its faces. It is applicable to thermal insulating products.

Keel en

Asendab EVS-EN 1607:1999

**FprEN 1608**

Identne FprEN 1608:2

Tähtaeg 29.08.2012

**Ehituses kasutatavad soojustusmaterjalid. Tõmbetugevuse määramine rööbiti pealispinnaga**

This European Standard specifies the equipment and procedures for determining the tensile strength of a product parallel to its faces. It is applicable to thermal insulating products. This European Standard can be used to determine whether the product has sufficient strength to withstand stresses during transportation and application.

Keel en

Asendab EVS-EN 1608:1999

**FprEN 1609**

Identne FprEN 1609:2012

Tähtaeg 29.08.2012

**Ehituses kasutatavad soojustusmaterjalid. Lühiajalise veemavuse määramine osalise sukeldamise teel**

This European Standard specifies the equipment and procedures for determining the short-term water absorption of test specimens by partial immersion. It is applicable to thermal insulating products. NOTE It is intended to simulate the water absorption caused by a 24 h raining period during construction work.

Keel en

Asendab EVS-EN 1609:1999; EVS-EN 1609:1999/A1:2006

**FprEN 12085**

Identne FprEN 12085:2012

Tähtaeg 29.08.2012

**Thermal insulating products for building applications - Determination of linear dimensions of test specimens**

This European Standard specifies the characteristics and choice of measuring equipment and the procedure for determining the linear dimensions of test specimens which are taken from thermal insulating products. The procedures for measuring the dimensions of full size products are specified in EN 822 and EN 823.

Keel en

Asendab EVS-EN ISO 12085:1999; EVS-EN ISO 12085:1999/AC:2008



**FprEN 12086**

Identne FprEN 12086:2012

Tähtaeg 29.08.2012

**Ehituses kasutatavad soojustusmaterjalid. Veeauru läbilaskvuse määramine**

This European Standard specifies the equipment and procedures for determining the water vapour transmission rate, water vapour permeance and water vapour permeability of test specimens in the steady state under different sets of specified test conditions. It is applicable to thermal insulating products. It is intended to be used for homogeneous materials (see note 1) and for products which may contain integral skins or facings of different material(s). NOTE 1 A material is considered to be homogeneous, with regard to mass distribution, if its density is approximately the same throughout, i.e. if the measured density values are close to its mean density. NOTE 2 This test method is not normally used for determining the water vapour transmission properties of single, separate vapour barriers (of high diffusion resistance), such as prefabricated films, foils, membranes or sheets, due to the long duration of the test. For products with a vapour retarder or barrier with a water vapour diffusion equivalent air layer thickness  $s_d \geq 1\ 000\ \text{m}$  (see 3.6) other test methods e.g. IR-detection can be used for measuring the single separate vapour retarder or barrier, provided that the results obtained are in the same range as the values measured in accordance with this standard. The water vapour transmission rate and permeance values are specific to the test specimen (i.e. the product) thickness tested. For homogeneous products, the water vapour permeability is a property of the material.

Keel en

Asendab EVS-EN 12086:1999

**FprEN 12087**

Identne FprEN 12087:2012

Tähtaeg 29.08.2012

**Ehituses kasutatavad soojustusmaterjalid. Pikaajalise veeimavuse määramine sukeldamise teel**

This European Standard specifies the equipment and procedures for determining the long-term water absorption of test specimens. It is applicable to thermal insulating products. This European Standard specifies two options: Method 1 - partial immersion Method 2 - total immersion The long-term water absorption by partial immersion is intended to simulate the water absorption caused by long term water exposure. The long-term water absorption by total immersion is not directly related to the conditions on site, but has been recognized as a relevant condition of test for some products in some applications.

Keel en

Asendab EVS-EN 12087:1999/A1:2006; EVS-EN 12087:1999

**FprEN 12088**

Identne FprEN 12088:2012

Tähtaeg 29.08.2012

**Ehituses kasutatavad soojustusmaterjalid. Pikaajalise veeimavuse määramine difusioonmeetodil**

This European Standard specifies the equipment and procedures for determining the long-term water absorption of test specimens by diffusion. It is applicable to thermal insulating products. It is intended to simulate the water absorption of products subjected to high relative humidities, approximating to 100 %, on both sides and subjected to a water vapour pressure gradient for a long period of time e.g. inverted roof or unprotected ground insulation. The test is not applicable for all types of thermal insulating products. The product standard should state for which of its products, if any, this test is applicable. NOTE For unprotected ground insulation the temperature of 50 °C might be replaced by a lower temperature, when more data is available.

Keel en

Asendab EVS-EN 12088:1999

**FprEN 12089**

Identne FprEN 12089:2012

Tähtaeg 29.08.2012

**Ehituses kasutatavad soojustusmaterjalid. Paindeomaduste määramine**

This European Standard specifies the equipment and procedures for determining the bending behaviour of full size products (Method A) and test specimens (Method B) under the action of three-point loading. It is applicable to thermal insulating products. The test is designed to determine the bending strength of products and their deflection at a given load. The method can be used to determine the resistance of the product to bending stresses during transport and application.

Keel en

Asendab EVS-EN 12089:1999

**FprEN 12090**

Identne FprEN 12090:2012

Tähtaeg 29.08.2012

**Ehituses kasutatavad soojustusmaterjalid. Nihkeomaduste määramine**

This European Standard specifies the equipment and procedures for determining shear behaviour. It is applicable to thermal insulating products. NOTE The tests described in this standard do not determine pure shear behaviour, but measure the effects of applying two opposite parallel forces to the major faces of the test specimen. The test is however called shear in this text by convention. The application of a force tangentially to the major surface of the test specimen is considered to represent more closely the stresses imposed upon thermal insulation products in many building applications, particularly walls, than other methods of measuring shear performance e.g. bending tests.

Keel en

Asendab EVS-EN 12090:1999

**FprEN 12091**

Identne FprEN 12091:2012

Tähtaeg 29.08.2012

**Ehituses kasutatavad soojustusmaterjalid.  
Külmakindluse määramine**

This European Standard specifies the equipment and procedures for determining the effect of successive cycling from dry conditions at -20 C to wet conditions at 20 C on the mechanical properties and moisture content of the product. It is applicable to thermal insulating products. It is intended to simulate freeze-thaw effects on thermal insulating products which are frequently exposed to water and low temperature conditions, e.g. inverted roofs and unprotected ground insulation. This test method is not recommended for all thermal insulating products. If relevant the product standards will state for which products this standard is applicable.

Keel en

Asendab EVS-EN 12091:1999

**FprEN 12430**

Identne FprEN 12430:2012

Tähtaeg 29.08.2012

**Ehituses kasutatavad soojustusmaterjalid.  
Punktkoormuse mõju määramine**

This European Standard specifies equipment and procedures for determining the behaviour of products under a force applied to a small area of a test specimen at a given speed. It is applicable to thermal insulating products. This European Standard can be used to determine whether the products have sufficient strength to withstand forces applied directly to them either during installation or during application, mainly caused by pedestrian traffic. NOTE The test methods given in the main body of the standard and in Annex A are reported and interpreted in different ways. The similarities that exist between the methods are not sufficient to permit reasonable comparisons to be made.

Keel en

Asendab EVS-EN 12430:1999; EVS-EN 12430:1999/A1:2006

**FprEN 12431**

Identne FprEN 12431:2012

Tähtaeg 29.08.2012

**Ehituses kasutatavad soojustusmaterjalid.  
Ujuvpõrandate soojustusmaterjalide paksuse määramine**

This European Standard specifies the equipment and procedures for determining the thickness of thermal insulating products for impact sound insulation in floating floor applications.

Keel en

Asendab EVS-EN 12431:1999; EVS-EN 12431:1999/A1:2006

**FprEN 13142**

Identne FprEN 13142:2012

Tähtaeg 29.08.2012

**Hoonete ventilatsioon – Elamute ventilatsiooniseadmed ja -komponendid – Nõutavad ja valikulised katsetamise karakteristikad**

This European Standard specifies and classifies the component/product performance characteristics which may be necessary for the design and dimensioning of residential ventilation systems to provide the predetermined comfort conditions of temperature, air velocity, humidity, hygiene and sound in the occupied zone. It defines those performance characteristics (mandatory or optional) which shall be determined, measured and presented according to relevant test methods. It provides a classification scheme which leads to a full definition of product properties based on test methods described in various EN Standards and gives an overview of the Test Standards. Distinction between mandatory and optional requirement is left to each national regulations. The codification part in Annex A and the classification part in Clause 4 apply to the following products: - mechanical supply and exhaust ventilation units for single dwellings according to EN 13141-7; - un-ducted mechanical supply and exhaust ventilation units for a single room according to EN 13141-8. This standard does not apply to other products such as filters, fire dampers, ducts, control devices and sound attenuators, which may also be incorporated in residential ventilation. This standard does not cover requirements raised by European Directives, for example: low voltage directive, EMC directive and other requirements such as corrosion, resistance and snow penetration.

Keel en

Asendab EVS-EN 13142:2004

**FprEN 13450**

Identne FprEN 13450:2012

Tähtaeg 29.08.2012

**Raudteeballast**

This European Standard specifies the properties of aggregates obtained by processing natural, manufactured or recycled crushed unbound aggregates for use in construction of the upper layer of railway track. For the purposes of this standard, the aggregate is referred to as railway ballast. A list of the source materials that have been considered and are within the scope of this European Standard is given in Annex E (normative). NOTE 1 Reused railway ballast: railway ballast resulting of previously used railway ballast on site and without putting it on the market is not covered by this European Standard. It also specifies that a quality control system is in place for use in factory production control and it provides for the evaluation of conformity of the products to this European Standard. It incorporates a general requirement that railway ballast should not release any dangerous substances in excess of the maximum permitted levels specified in a relevant European Standard for the material or permitted in the national regulations of the member state of destination (see NOTE 2). NOTE 2 Railway ballast used in construction should comply with all the requirements of this European Standard. The standard includes comprehensive and specific requirements for natural aggregates and recycled ballast, dealing with, for example, the stability of certain basalts. For materials from some other secondary sources, however, work is ongoing and the requirements are incomplete. In the meantime such materials, when placed on the market as railway ballast, should conform fully to this standard but may also be required to conform to specific relevant additional requirements at the place of use. Additional characteristics and requirements may be specified on a case by case basis depending upon experience of use of the product, and defined in specific contractual documents. NOTE 3 Requirements for the declaration of the potential of railway ballast to release regulated dangerous substances are currently under development. Until such time as these are finalised, attention should be paid to requirements at the place of use.

Keel en

Asendab EVS-EN 13450:2007

**FprEN 13984**

Identne FprEN 13984:2012

Tähtaeg 29.08.2012

**Elastsed niiskuisolatsioonimaterjalid. Plastikust ja kummist aurutõkkematerjalid. Definitsioonid ja omadused**

This European Standard specifies the characteristics of flexible sheets of plastic or rubber intended for use as water vapour control layers for buildings and applies to both reinforced and unreinforced products. It specifies requirements and test methods and provides for the evaluation of conformity of the products with the requirements of this European Standard.

Keel en

Asendab EVS-EN 13984:2005; EVS-EN 13984:2005/A1:2007

**FprEN 16445**

Identne FprEN 16445:2012:2012

Tähtaeg 29.08.2012

**Ventilation for buildings - Air diffusion - Aerodynamic testing and rating for mixed flow application: non-isothermal procedure for cold jet**

This European Standard specifies methods for the laboratory aerodynamic testing and rating of air terminal devices for mixed flow applications, including the specification of suitable test facilities and measurement techniques. This standard applies to laboratory testing of ATD for technical characterisation. The standard gives only tests for the assessment of characteristics of the air terminal devices for mixed flow applications, under non-isothermal conditions with a cold jet. It does not cover the testing of isothermal or low velocity terminal devices which are covered by other published standards. This European Standard applies to ventilation or air conditioning systems designed for the maintenance of comfort conditions for buildings. It is not applicable in the case of systems for the control of industrial or other special process environments. In the latter case however, it may be referred to if the system technology is similar to that of the above mentioned ventilation and air conditioning systems. The principles described in this European Standard can also be used on site or in a lab for full-scale measurements.

Keel en

**HD 60364-7-705:2007/FprA11**

Identne HD 60364-7-705:2007/FprA11:2012

Tähtaeg 29.08.2012

**Madalpingelised elektripaigaldised. Osa 7-705: Nõuded eripaigaldistele ja -paikadele. Põllundus- ja aiandusehitised**

The requirements of this part of HD 60364 apply to fixed electrical installations inside and outdoors of agricultural and horticultural premises. Some of the requirements are also applicable to other locations that are in common buildings belonging to the agricultural and horticultural premises. Rooms, locations and areas for household applications and similar are not covered by this standard. If some of the special requirements of Part 7-705 are also applicable for residences and other locations in such common buildings this is stated in the normative text.

Keel en

### **prEN ISO 4064-1**

Identne ISO 4064-1 rev:2012  
ja identne ISO/DIS 4064-1:2012  
Tähtaeg 29.08.2012

#### **Water meters for cold potable water and hot water - Part 1: Metrological and technical requirements (ISO/DIS 4064-1:2012)**

This Part of ISO 4064/OIML R 49 applies to water meters used to meter the volume of cold potable water and hot water flowing through a fully charged, closed conduit. These water meters incorporate devices which indicate the integrated volume. This Part of ISO 4064/OIML R 49 also applies to water meters based on electrical or electronic principles, and to water meters based on mechanical principles incorporating electronic devices, used to measure the volume flow of hot water and cold potable water. It also applies to electronic ancillary devices. Ancillary devices are optional. However, national or regional regulations may make some ancillary devices mandatory in relation to the utilization of the water meter.

Keel en

Asendab EVS-EN 14154-1:2005+A2:2011; EVS-EN 14154-2:2005+A2:2011; EVS-EN 14154-3:2005+A2:2011

### **prEN ISO 4064-2**

Identne prEN ISO 4064-2 rev:2012  
ja identne ISO/DIS 4064-2:2012  
Tähtaeg 29.08.2012

#### **Water meters for cold potable water and hot water - Part 2: Test methods (ISO/DIS 4064-2:2012)**

This Part of ISO 4064/OIML R 49 is applicable to the type evaluation and initial verification testing of water meters for cold potable water and hot water as defined in ISO 4064-1/OIML R 49-1. OIML Certificates of Conformity can be issued for water meters under the scope of the OIML Certificate System, providing that the first three parts of ISO 4064/OIML R 49 are used in accordance with the rules of the System. This Part of ISO 4064/OIML R 49 sets out details of the test programme, principles, equipment and procedures to be used for the type evaluation and initial verification testing of a meter type. The provisions of this Part of ISO 4064/OIML R 49 also apply to ancillary devices, if required by national regulations. The provisions include requirements for testing the complete water meter and for testing the measurement transducer (including the flow or volume sensor) and the calculator (including the indicating device) of a water meter as separate units.

Keel en

Asendab EVS-EN 14154-1:2005+A2:2011; EVS-EN 14154-2:2005+A2:2011; EVS-EN 14154-3:2005+A2:2011

### **prEN ISO 12571**

Identne prEN ISO 12571 rev:2012  
ja identne ISO/DIS 12571:2012  
Tähtaeg 29.08.2012

#### **Hygrothermal performance of building materials and products - Determination of hygroscopic sorption properties (ISO/DIS 12571:2012)**

This standard specifies two alternative methods for determining hygroscopic sorption properties of porous building materials and products: a) using desiccators and weighing cups (desiccator method); b) using a climatic chamber (climatic chamber method). The desiccator method is the reference method. The standard does not specify the method for sampling. The methods specified in this standard can be used to determine the moisture content of a sample in equilibrium with air at a specific temperature and humidity.

Keel en

Asendab EVS-EN ISO 12571:2000

### **prEN ISO 15758**

Identne prEN ISO 15758 rev:2012  
ja identne ISO/DIS 15758:2012  
Tähtaeg 29.08.2012

#### **Hygrothermal performance of building equipment and industrial installations - Calculation of water vapour diffusion - Cold pipe insulation systems (ISO/DIS 15758:2012)**

This standard specifies a method to calculate the density of water vapour flow rate in cold pipe insulation systems, and the total amount of water diffused into the insulation over time. This calculation method presupposes that water vapour can only migrate into the insulation system by diffusion, with no contribution from airflow. It also assumes the use of homogeneous, isotropic insulation materials so that the water vapour partial pressure is constant at all points equidistant from the axis of the pipe. The standard is applicable when the temperature of the medium in the pipe is above 0 °C. It applies to pipes inside buildings as well as in the open air.

Keel en

Asendab EVS-EN 14114:2002

## **93 RAJATISED**

### **UUED STANDARDID JA PUBLIKATSIOONID**

#### **EVS-EN 12697-1:2012**

Hind 17,08  
Identne EN 12697-1:2012

#### **Asfaltsegud. Kuuma asfaltsegu katsemeetodid. Osa 1: Lahustuva sideaine sisaldus**

This document describes test methods for the determination of the soluble binder content of samples of bituminous mixtures. The test methods described are suitable for quality control purposes during the production of plant mix and for checking compliance with a product specification. For the analysis of mixtures containing modified binders, the guidance of Annex D should be followed.

Keel en

Asendab EVS-EN 12697-1:2006

**EVS-EN 12697-39:2012**

Hind 10,9

Identne EN 12697-39:2012

**Bituminous mixtures - Test methods for hot mix asphalt - Part 39: Binder content by ignition**

This document describes a test method for the determination of the binder content of samples of bituminous mixtures by ignition. As such, it is an alternative to the more traditional method of extracting the binder using solvents. The method can be used for evaluation of mixture composition because the remaining aggregate can be used for determining aggregate gradation and density, provided excessive breakdown of the aggregate particles does not occur at the temperature reached. The results can be used for process control or checks on the compliance of mixtures. However, the need for calibration of a mixture, either on the complete mixture or on each of its component materials separately, before an analysis can be carried out makes this method easier to use with regularly used mixtures rather than with an extensive range of different mixtures from different aggregate sources. The test method is equally suitable for the analysis of mixtures containing unmodified or modified binders because the method has to be calibrated for each mixture being checked when calibration on mixtures is used. In case of doubt/dispute, the determination of the calibration value based on laboratory-prepared bituminous mixtures (see A.1 and A.2) is the reference method.

Keel en

Asendab EVS-EN 12697-39:2004

**EVS-EN 13481-3:2012**

Hind 9,49

Identne EN 13481-3:2012

**Raudteealased rakendused. Rööbastee. Nõuded rööpa kinnitussüsteemide tööomadustele. Osa 3: Puitliiprite kinnitussüsteemid**

This European Standard is applicable to fastening systems, in categories A – C and E as specified in EN 13481-1:2012, 3.1, for use on wood sleepers in ballasted track with maximum axle loads and minimum curve radii in accordance with Table 1. The requirements apply to: - fastening systems which act on the foot and/or web of the rail including direct fastening systems and indirect fastening systems; - fastening systems for the rail sections in EN 13674-1 (excluding 49E4) and EN 13674-4. This standard is not applicable to fastening systems for other rail sections, rigid fastening systems or special fastening systems used at bolted joints or glued joints. This standard is for type approval of a complete fastening assembly only.

Keel en

Asendab EVS-EN 13481-3:2002; EVS-EN 13481-3:2002/A1:2006

**EVS-EN 13481-4:2012**

Hind 9,49

Identne EN 13481-4:2012

**Raudteealased rakendused. Rööbastee. Nõuded rööpa kinnitussüsteemide tööomadustele. Osa 4: Terasliiprite kinnitussüsteemid**

This European Standard is applicable to fastening systems, in categories A – C and E as specified in EN 13481-1:2012, 3.1, for use on rectilinear steel sleepers in ballasted track with maximum axle loads and minimum curve radii in accordance with Table 1. The requirements apply to: - fastening systems which act on the foot and/or web of the rail including direct fastening systems and indirect fastening systems; - fastening systems for the rail sections in EN 13674-1 (excluding 49E4) and EN 13674-4+A1. This standard is not applicable to fastening systems for other rail sections, rigid fastening systems or special fastening systems used at bolted joints or glued joints. This standard is for type approval of a complete fastening assembly only.

Keel en

Asendab EVS-EN 13481-4:2002; EVS-EN 13481-4:2002/A1:2006

**EVS-EN ISO 22282-1:2012**

Hind 13,92

Identne EN ISO 22282-1:2012

ja identne ISO 22282-1:2012

**Geotechnical investigation and testing - Geohydraulic testing - Part 1: General rules (ISO 22282-1:2012)**

This part of ISO 22282 establishes the general rules and principles for geohydraulic testing in soil and rock as part of the geotechnical investigation services in accordance with EN 1997-1 and EN 1997-2. It defines concepts and specifies requirements relating to permeability measurement in soil and rock. The different purposes of geohydraulic testing are to obtain information on the permeability of soil or rock in natural or treated states, transmissivity and storage coefficient, and hydrodynamic parameters of aquifers. Geohydraulic testing is used for many purposes, such as: a) absorption capacity and effectiveness of grouting in rock mass; b) assessment of seepage and drainage; c) assessment of groundwater lowering work; d) effects of cut-offs for dams; e) effects of tunnels and shaft sinking; f) checking fill or cover tightness; g) assessment of the flow of fluids and suspensions in the ground; h) planning for remedial measures. NOTE 1 Geohydraulic testing for water supply is covered by ISO 14686. NOTE 2 For most types of ground, field permeability tests yield more reliable data than those carried out in the laboratory, because a larger volume of material is tested, and because the ground is tested in situ, thereby including effects resulting from the structure of the ground mass but avoiding the disturbance associated with sampling. This part of ISO 22282 deals with the execution of tests with groundwater and does not explicitly consider other fluids and suspensions. The flow of other fluids and suspensions can be considered by applying the different viscosities and relations between transmissivity, permeability coefficient and intrinsic permeability.

Keel en

**EVS-EN ISO 22282-2:2012**

Hind 13,92

Identne EN ISO 22282-2:2012

ja identne ISO 22282-2:2012

**Geotechnical investigation and testing -  
Geohydraulic testing - Part 2: Water permeability  
tests in a borehole using open systems (ISO 22282-  
2:2012)**

This part of ISO 22282 specifies requirements for the determination of the local permeability in soils and rocks below and above groundwater level in an open hole by water permeability tests as part of the geotechnical investigation services according to EN 1997-1 and EN 1997-2.

Keel en

**EVS-EN ISO 22282-3:2012**

Hind 13,22

Identne EN ISO 22282-3:2012

ja identne ISO 22282-3:2012

**Geotechnical investigation and testing -  
Geohydraulic testing - Part 3: Water pressure tests in  
rock (ISO 22282-3:2012)**

This part of ISO 22282 specifies the requirements for water pressures tests (WPT) carried out in boreholes drilled into rock as part of geotechnical investigation and testing according to EN 1997-1 and EN 1997-2. The tests are used to investigate the following: - hydraulic properties of the rock mass, which are mainly governed by discontinuities; - absorption capacity of the rock mass; tightness of the rock mass; - effectiveness of grouting; - geomechanical behaviour, e.g. hydrofracturing, hydrojacking. Many effects of the geohydraulic tests are not only influenced by the ground itself, but stem from the testing procedure. Historically, the water pressure test was evaluated based on the assumption that the stationary behaviour was achieved. Recent advances in geohydraulics have shown that transient phenomena are often present. This part of ISO 22282 attempts to address the limitations of certain testing procedures without restricting the required equipment too stringently.

Keel en

**EVS-EN ISO 22282-4:2012**

Hind 13,22

Identne EN ISO 22282-4:2012

ja identne ISO 22282-4:2012

**Geotechnical investigation and testing -  
Geohydraulic testing - Part 4: Pumping tests (ISO  
22282-4:2012)**

This part of ISO 22282 establishes requirements for pumping tests as part of geotechnical investigation service in accordance with EN 1997-1 and EN 1997-2. A pumping test consists in principle of: - drawing down the piezometric surface of the groundwater by pumping from a well (the test well); - measuring the pumped discharge and the water level in the test well and piezometers, before, during and after pumping, as a function of time. This part of ISO 22282 applies to pumping tests performed on aquifers whose permeability is such that pumping from a well can create a lowering of the piezometric head within hours or days depending on the ground conditions and the purpose. It covers pumping tests carried out in soils and rock. The tests concerned by this part of ISO 22282 are those intended for evaluating the hydrodynamic parameters of an aquifer and well parameters, such as: - permeability of the aquifer, - radius of influence of pumping, - pumping rate of a well, - response of drawdown in an aquifer during pumping, - skin effect, - well storage, - response of recovery in an aquifer after pumping.

Keel en

**EVS-EN ISO 22282-6:2012**

Hind 10,19

Identne EN ISO 22282-6:2012

ja identne ISO 22282-6:2012

**Geotechnical investigation and testing -  
Geohydraulic testing - Part 6: Water permeability  
tests in a borehole using closed systems (ISO 22282-  
6:2012)**

This part of ISO 22282 specifies requirements for the determination of the local permeability in soils and rocks below or above the groundwater table in a closed system by the water permeability tests as part of the geotechnical investigation services according to EN 1997-1 and EN 1997-2. The tests are used to determine the permeability coefficient  $k$  in low permeability soils and rock lower than 10–8 m/s. It can also be used to determine the transmissivity  $T$  and the storage coefficient  $S$ . NOTE The water pressure test in rock is covered by ISO 22282-3.

Keel en

**EVS-EN ISO 22282-5:2012**

Hind 11,67

Identne EN ISO 22282-5:2012

ja identne ISO 22282-5:2012

**Geotechnical investigation and testing -  
Geohydraulic testing - Part 5: Infiltrometer tests (ISO  
22282-5:2012)**

This part of ISO 22282 establishes requirements for ground investigations by means of infiltrometer tests as part of geotechnical investigation services in accordance with EN 1997-1 and EN 1997-2. It applies to the in situ determination of the water permeability of an existing geological formation or of treated or compacted materials. The infiltrometer test is used to determine the infiltration capacity of the ground at the surface or shallow depth. It is a simple test for determining the permeability coefficient. The method can be applied using either steady-state or transient conditions, in saturated or unsaturated soils. The principle of the test is based on the measurement of a surface vertical flow rate of water which infiltrates the soil under the influence of a positive hydraulic head. Surface infiltration devices include single and double-ring infiltrometer designs of the open or closed type. The measurement devices and measurement procedures are adapted to different ranges of permeability. Open systems are adapted to permeability ranges from 10<sup>-5</sup> to 10<sup>-8</sup> m/s and closed systems for permeability lower than 10<sup>-8</sup>. Depending on the environmental conditions and the water permeability of the soil, a duration of a few minutes to a few days is needed to run the test. This part of ISO 22282 defines the terminology and the measured parameters. It specifies the required characteristics of the equipment, defines the procedures of the tests relating to the different measurement techniques and specifies the tests results. It is applicable to: - civil engineering projects; - hydrogeology studies; and - waste storage.

Keel en

**ASENDATUD VÕI TÜHISTATUD STANDARDID****EVS-EN 12697-1:2006**

Identne EN 12697-1:2005

**Asfaltsegud - Kuuma asfaltsegu katsemeetodid - Osa  
1: Lahustuva sideaine sisaldus**

Käesolev dokument kirjeldab katsemeetodeid lahustuva sideaine sisalduse määramiseks bituumensegudes. Kirjeldatud katsemeetodid on sobivad kvaliteedikontrolli teostamiseks segude tootmisel ja spetsifikatsioonide vastavuse kontrollimisel. Modifitseeritud sideaineid sisaldavate segude analüüsimine ei kuulu käesoleva dokumendi käsitlusalasse, välja arvatud juhul, kui järgitakse lisas D antud soovitusi. Isegi nimetatud soovitude järgimisel võib analüüsitulemuste täpsus jätta soovida.

Keel et

Asendab EVS-EN 12697-1:2001

Asendatud EVS-EN 12697-1:2012

**EVS-EN 12697-39:2004**

Identne EN 12697-39:2004

**Bituminous mixtures - Test methods for hot mix  
asphalt - Part 39: Binder content by ignition**

This European Standard describes the procedures to be followed for the determination of the binder content of samples of bituminous mixtures by ignition. As such, it is an alternative to the more traditional method of extracting the binder using solvents

Keel en

Asendatud EVS-EN 12697-39:2012

**EVS-EN 13481-4:2002**

Identne EN 13481-4:2002+AC:2004

**Railway applications - Track - Performance  
requirements for fastening systems - Part 4:  
Fastening systems for steel sleepers**

This European Standard is applicable to fastening systems for use on steel sleepers in ballasted track as follows: - main lines having a radius of curvature greater than 150 m and subject to a maximum design axle load of 260 kN; - light rail systems having a radius of curvature greater than 80 m and subject to a maximum design axle load of 130 kN

Keel en

Asendatud EVS-EN 13481-4:2012

**EVS-EN 13481-3:2002**

Identne EN 13481-3:2002

**Railway applications - Track - Performance  
requirements for fastening systems - Part 3:  
Fastening systems for wood sleepers**

This European Standard is applicable to fastening systems for use on wood sleepers in ballasted track as follows: - main lines having a radius of curvature greater than 150 m and subject to a maximum design axle load of 260kN; - light rail systems having a radius of curvature greater than 80 m and subject to a maximum design axle load of 130 kN

Keel en

Asendatud EVS-EN 13481-3:2012

**EVS-EN 13481-3:2002/A1:2006**

Identne EN 13481-3:2002/A1:2006

**Railway applications - Track - Performance  
requirements for fastening systems - Part 3:  
Fastening systems for wood sleepers**

This European Standard is applicable to fastening systems for use on wood sleepers in ballasted track as follows: - main lines having a radius of curvature greater than 150 m and subject to a maximum design axle load of 260kN; - light rail systems having a radius of curvature greater than 80 m and subject to a maximum design axle load of 130 kN

Keel en

Asendatud EVS-EN 13481-3:2012

**EVS-EN 13481-4:2002/A1:2006**

Identne EN 13481-4:2002/A1:2006

**Railway applications - Track - Performance  
requirements for fastening systems - Part 4:  
Fastening systems for steel sleepers**

This European Standard is applicable to fastening systems for use on steel sleepers in ballasted track as follows: - main lines having a radius of curvature greater than 150 m and subject to a maximum design axle load of 260 kN; - light rail systems having a radius of curvature greater than 80 m and subject to a maximum design axle load of 130 kN

Keel en

Asendatud EVS-EN 13481-4:2012

## **KAVANDITE ARVAMUSKÜSITLUS**

### **FprEN 13450**

Identne FprEN 13450:2012

Tähtaeg 29.08.2012

#### **Raudteeballast**

This European Standard specifies the properties of aggregates obtained by processing natural, manufactured or recycled crushed unbound aggregates for use in construction of the upper layer of railway track. For the purposes of this standard, the aggregate is referred to as railway ballast. A list of the source materials that have been considered and are within the scope of this European Standard is given in Annex E (normative). NOTE 1 Reused railway ballast: railway ballast resulting of previously used railway ballast on site and without putting it on the market is not covered by this European Standard. It also specifies that a quality control system is in place for use in factory production control and it provides for the evaluation of conformity of the products to this European Standard. It incorporates a general requirement that railway ballast should not release any dangerous substances in excess of the maximum permitted levels specified in a relevant European Standard for the material or permitted in the national regulations of the member state of destination (see NOTE 2). NOTE 2 Railway ballast used in construction should comply with all the requirements of this European Standard. The standard includes comprehensive and specific requirements for natural aggregates and recycled ballast, dealing with, for example, the stability of certain basalts. For materials from some other secondary sources, however, work is ongoing and the requirements are incomplete. In the meantime such materials, when placed on the market as railway ballast, should conform fully to this standard but may also be required to conform to specific relevant additional requirements at the place of use. Additional characteristics and requirements may be specified on a case by case basis depending upon experience of use of the product, and defined in specific contractual documents. NOTE 3 Requirements for the declaration of the potential of railway ballast to release regulated dangerous substances are currently under development. Until such time as these are finalised, attention should be paid to requirements at the place of use.

Keel en

Asendab EVS-EN 13450:2007

### **FprEN ISO 22476-4**

Identne FprEN ISO 22476-4:2012

ja identne ISO/FDIS 22476-4:2012

Tähtaeg 29.08.2012

#### **Geotechnical investigation and testing - Field testing - Part 4: Ménard pressuremeter test (ISO/FDIS 22476-4:2012)**

This part of ISO 22476 specifies the equipment requirements, execution of and reporting on the Ménard pressuremeter test. NOTE 1 This part of ISO 22476 fulfils the requirements for the Ménard pressuremeter test, as part of the geotechnical investigation and testing according to EN 1997-1 and EN 1997-2. This part of ISO 22476 describes the procedure for conducting a Ménard pressuremeter test in natural soils, treated or untreated fills and in weak rocks, either on land or off-shore. The pressuremeter test results of this part of ISO 22476 are suited to a quantitative determination of ground strength and deformation parameters. They may yield lithological information. They can also be combined with direct investigation (e.g. sampling according to ISO 22475-1) or compared with other in situ tests (see EN 1997-2:2007, 2.4.1.4(2) P, 4.1 (1) P and 4.2.3(2) P). The Ménard pressuremeter test is performed by the radial expansion of a tricell probe placed in the ground (see Figure 1). During the injection of the liquid volume in the probe, the inflation of the three cells first brings the outer cover of the probe into contact with the pocket wall and then presses on them resulting in a soil displacement. Pressure applied to and the associated volume expansion of the probe are measured and recorded so as to obtain the stress-strain relationship of the soil as tested.

Keel en

### **prEN 1317-4**

Identne prEN 1317-4:2012

Tähtaeg 29.08.2012

#### **Road restraint systems - Part 4: Performance classes, impact test acceptance criteria and test methods for transitions and removable barrier sections**

This part of EN 1317 is a supporting standard to EN 1317-5 and should also be read in conjunction with EN 1317-1 and EN 1317-2. This part of EN 1317 completes EN 1317-2 because it specifies performance for transitions, considered as the linkage between safety barriers of different types. This European Standard specifies the direction of impact and the impact points, for the assessment of transitions and removable barrier sections. It also defines the rules to be followed in the design of transitions that cannot be CE marking.

Keel en

Asendab EVS-ENV 1317-4:2010



## prEN 1317-7

Identne prEN 1317-7:2012

Tähtaeg 29.08.2012

### Road restraint systems - Part 7: Performance classes, impact test acceptance criteria and test methods for terminals of safety barriers

This part of EN 1317 specifies requirements on the impact performance of terminals, performance classes, lateral displacement, vehicle redirection classes, terminal direction classes, VCDI and impact severity levels. NOTE This European Standard should be read in conjunction with EN 1317-1. Both these standards support EN 1317-5. The modifications included in this European Standard are not a change of test criteria, in the sense of the EN 1317-5:2007+A2:2012, ZA.3. The performance of a terminal in general is dependent on the barrier connected.

Keel en

Asendab EVS-ENV 1317-4:2010

## 97 OLME. MEELELAHUTUS. SPORT

### UUED STANDARDID JA PUBLIKATSIOONID

#### EVS-EN 13537:2012

Hind 13,22

Identne EN 13537:2012

#### Requirements for sleeping bags

This European Standard specifies the requirements and test methods as well as provisions for labelling of adult sized sleeping bags for use in sports and leisure time activities. This European Standard does not apply to sleeping bags intended for specific purpose such as military use and extreme climate zone expedition. It does not apply to sleeping bags for children or babies: no prediction model exists for the determination of the limiting temperatures based on the thermal resistance of the sleeping bag for these demographics. Moreover, such a model for testing cannot be developed because the necessary controlled sleep trials with children or babies in climatic chambers are, out of ethical reasons, not permitted. This European Standard describes the method for the assessment of the performance in steady state conditions of a sleeping bag with regard to the protection against cold.

Keel en

Asendab EVS-EN 13537:2002

#### EVS-EN 50574:2012

Hind 15,4

Identne EN 50574:2012

#### Collection, logistics & treatment requirements for end-of-life household appliances containing volatile fluorocarbons or volatile hydrocarbons

This European Standard defines requirements for the end of life handling, transportation, storage, sorting and treatment of WEEE household appliances containing volatile fluorocarbons, volatile hydrocarbons, or both. Furthermore, this European Standard only applies to WEEE household appliances that use heat-transfer media other than water e.g. refrigerators, freezers, heat pump tumble dryers, de-humidifiers and portable air conditioners. Discarded appliances covered by this European Standard will have been deposited at a collection facility as domestic WEEE. The European Standard describes requirements for the removal of volatile fluorocarbons and volatile hydrocarbons. These substances can be found as refrigerant in the refrigerating system (partly dissolved in the oil) and as blowing agent in the insulating foam of discarded household appliances.

Keel en

#### EVS-EN 60335-2-2:2003/A11:2011/AC:2012

Hind 0

Identne EN 60335-2-2:2003/A11:2010/AC:2012

#### Majapidamis- ja muud taolised elektriseadmed. Ohutus. Osa 2-2: Erinõuded tolmuimejatele ja veeimemis-puhastusseadmetele

Keel en

#### EVS-EN 60335-2-3:2003/A11:2011/AC:2012

Hind 0

Identne EN 60335-2-3:2002/A11:2010/AC:2012

#### Majapidamis- ja muud taolised elektriseadmed. Ohutus. Osa 2-3: Erinõuded elektritriikraudadele

Keel en

#### EVS-EN 60335-2-6:2003/A11:2011/AC:2012

Hind 0

Identne EN 60335-2-6:2003/A11:2010/AC:2012

#### Majapidamis- ja muud taolised elektriseadmed. Ohutus. Osa 2-6: Erinõuded statsionaarsetele pliitidele, pliidiplaatidele, ahjudele ja muudele taolistele seadmetele

Keel en

#### EVS-EN 60335-2-7:2003/A11:2011/AC:2012

Hind 0

Identne EN 60335-2-7:2003/A11:2010/AC:2012

#### Majapidamis- ja muud taolised elektriseadmed. Ohutus. Osa 2-7: Erinõuded pesumasinatele

Keel en

#### EVS-EN 60335-2-9:2003/A13:2010/AC:2012

Hind 0

Identne EN 60335-2-9:2003/A13:2010/AC:2012

#### Majapidamis- ja muud taolised elektriseadmed. Ohutus. Osa 2-9: Erinõuded rösteritele, grillidele ja muudele taolistele seadmetele

Keel en

#### EVS-EN 60335-2-23:2003/A11:2011/AC:2012

Hind 0

Identne EN 60335-2-23:2003/A11:2010/AC:2012

#### Majapidamis- ja muud taolised elektriseadmed. Ohutus. Osa 2-23: Erinõuded naha- ja juuksehooldusseadmetele

Keel en

**EVS-EN 60335-2-25:2003/A11:2010/AC:2012**

Hind 0

Identne EN 60335-2-25:2002/A11:2010/AC:2012

**Majapidamis- ja muud taolised elektriseadmed. Ohutus. Osa 2-25: Erinõuded mikrolaineahjudele**

Keel en

**EVS-EN 60335-2-52:2003/A11:2011/AC:2012**

Hind 0

Identne EN 60335-2-52:2003/A11:2010/AC:2012

**Majapidamis- ja muud taolised elektriseadmed. Ohutus. Osa 2-52: Erinõuded suuhügieeniseadmetele**

Keel en

**EVS-EN 60704-2-4:2012**

Hind 10,19

Identne EN 60704-2-4:2012

ja identne IEC 60704-2-4:2011

**Kodumajapidamises ja sarnastes oludes kasutatavad elektriseadmed. Katsenormid õhumüra määramiseks. Osa 2-4: Erinõuded pesumasinatele ja tsentrifuugidele**

These particular requirements apply to single unit electrical washing machines and the washing and spinning function of combined appliances for household and similar use and to spin extractors for household and similar use.

Keel en

Asendab EVS-EN 60704-2-4:2002

**ASENDATUD VÕI TÜHISTATUD STANDARDID**

**EVS-EN 13537:2002**

Identne EN 13537:2002

**Requirements for sleeping bags**

This European Standard specifies definitions and general requirements as well as provisions for marking and the Information supplied by the manufacturer for sleeping bags used in sports and leisure time activities. It does not apply to sleeping bags intended for specific purpose such as e.g. military use and extreme climate zone expedition

Keel en

Asendatud EVS-EN 13537:2012

**EVS-EN 60704-2-4:2002**

Identne EN 60704-2-4:2001

ja identne IEC 60704-2-4:2001

**Kodumajapidamises ja sarnastes oludes kasutatavad elektriseadmed. Katsenormid õhumüra määramiseks. Osa 2-4: Erinõuded pesumasinatele ja tsentrifuugidele**

This standard applies to single unit electric washing machines for household and similar use, and to spin extractors. Limitations for the use of this test code are given in the scope clause of IEC Publication 704-1.

Keel en

Asendatud EVS-EN 60704-2-4:2012

**KAVANDITE ARVAMUSKÜSITLUS**

**prEN 15999-1**

Identne prEN 15999-1:2012

Tähtaeg 29.08.2012

**Conservation of cultural heritage - Guidelines for management of environmental conditions - Recommendations for showcases used for exhibition and preservation of cultural property - Part 1: General requirements**

This document defines the characteristics and the conditions for use of showcases for the exhibition of cultural property, reducing environmental interaction and complying with the requirements for better preservation in order to improve visibility and ensure its safety and security.

Keel en

**prEN 16455**

Identne prEN 16455:2012

Tähtaeg 29.08.2012

**Conservation of cultural heritage - Determination of soluble salts in natural stone and related materials used in cultural heritage**

This standard provides a methodology for the qualitative and quantitative analysis of anions and cations obtained by dissolution of soluble salts present in either natural stone or other porous inorganic material including mortar, stucco, brick, and ceramic material. The ions considered in this standard are: Cl<sup>-</sup>, NO<sub>2</sub><sup>-</sup>, NO<sub>3</sub><sup>-</sup>, PO<sub>4</sub><sup>3-</sup>, SO<sub>4</sub><sup>2-</sup>, C<sub>2</sub>O<sub>4</sub><sup>2-</sup>, CO<sub>3</sub><sup>2-</sup>, Na<sup>+</sup>, K<sup>+</sup>, NH<sub>4</sub><sup>+</sup>, Ca<sup>2+</sup>, Mg<sup>2+</sup>

Keel en

## STANDARDITE TÕLKED KOMMENTEERIMISEL

Selles jaotises avaldame teavet eesti keelde tõlgitavate Euroopa või rahvusvaheliste standardite kohta ja inglise keelde tõlgitavate algupäraste standardite kohta.

Standardite tõlgetega tutvumiseks palume ühendust võtta EVS-i standardiosakonnaga [standardiosakond@evs.ee](mailto:standardiosakond@evs.ee) või ostmiseks klienditeenindusega [standard@evs.ee](mailto:standard@evs.ee).

**Tõlgete kommenteerimise ja ettepanekute esitamise perioodi lõpp on 01.08.2012**

### **EVS-EN 1011-2:2001+A1:2004**

#### **Keevitus. Soovitused metallmaterjalide keevitamiseks. Osa 2: Ferriitateraste kaarkeevitus** (konsolideeritud tekst)

Standard annab juhised ferriitsete teraste (vt punkt 5), välja arvatud ferriitsed roostevabad terased, kõikide toodete vormide puhul käsi-, poolautomaatseks, mehhaniseeritud ja automaatkaarkeevituseks.

Identne: EN 1011-2:2001+EN 1011:2001/A1:2003

### **EVS-EN 1168:2006+A3:2011**

#### **Betoonvalmistooted. Õõnespaneelid KONSOLIDEERITUD TEKST**

Euroopa standard käsitleb normaaltihedusega raud- või pingebetoonist õõnespaneelidele esitatavaid nõudeid ja peamisi toimevõime kriteeriume ning vajaduse korral spetsifitseerib minimaalsed väärtused vastavalt standardile EN 1992-1-1:2004.

Standard hõlmab terminoloogiat, toimevõime kriteeriume, tolerantse, asjakohaseid füüsikalisi omadusi, spetsiaalseid katsemeetodeid ja transpordi ning montaaži iseärasusi. Õõnespaneeli kasutatakse vahe- ja katuslagedes, seintes ja nendesarnastes konstruktsioonides. Standardis käsitletakse materjali omadusi ja teisi nõudeid vahe- ja katuslagede puhul, seintes ja mujal kasutamise erijuhul võivad asjakohased tootestandardid esitada täiendavaid nõudeid.

Identne: EN 1168:2005+A3:2011

### **EVS-EN 13032-1:2004+A1:2012**

#### **Valgus ja valgustus. Lampide ja valgustite fotomeetriliste andmete mõõtmine ja esitamine. Osa 1: Mõõtmine ja failiformaat KONSOLIDEERITUD TEKST**

Euroopa standard kehtestab valgustuses kasutatavate peamiste fotomeetriliste andmete mõõtmiste üldpõhimõtted. Standard kehtestab mõõtmiskriteeriumid peamiste fotomeetriliste

andmete standardimiseks ja üksikasjalise CEN-failiformaadi andmete elektrooniliseks edastamiseks. See dokument on standardisarja esimene osa. Selles osas käsitletakse põhilisi fotomeetrilisi mõõtmisi ja failiformaati. Teistes osades käsitletakse lampide ja valgustite andmeid sõltuvalt nende rakendusala.

Identne: EN 13032-1:2004+A1:2012

### **EVS-EN 13224:2011**

#### **Betoonvalmistooted. Ribipaneelid**

Standard määrab kindlaks vahe- ja katuslagedes kasutatavatele normaaltihedusega raud- või pingebetoonist ribipaneelidele (monteeritavad ribipaneelid) esitatavad nõuded, peamised toimevõime kriteeriumid ning vastavuse hindamise korra. Elemendid koosnevad ülemisest ja/või alumisest plaadist ja ühest või enamast ribist, esineda võivad ka põikiribid. Mõned näited käesolevas standardis käsitletavate elementide kohta on toodud lisas A. Väikestele ribipaneelidele esitatavad erinõuded on loetletud lisas B. Standard käsitleb terminoloogiat, toimevõime kriteeriume, tolerantse, asjakohaseid füüsikalisi omadusi, katsemeetodeid ja transporti ning ehitamist. Standard ei käsitle kandevõime määramist katsetega.

Identne: EN 13224:2011

### **EVS-EN 1423:2012**

#### **Teemärgistusmaterjalid.**

#### **Pealepuistematerjalid. Klaaskuulid, libisemisvastased materjalid ja nende segud**

See Euroopa standard määratleb klaaskuulidele, libisemisvastastele materjalidele ja nende kahe segudele kohaldatavad nõuded, mida kasutatakse teemärgistustoodetele (st värvid, külmplastikud ja termoplastikud) pealepuistematerjalidena. See Euroopa standard ei hõlma muude teemärgistustoodete tootmisprotsessi käigus kasutatavaid

klaaskuule ja/või libisemisvastaseid materjale või nende segusid.

Identne: EN 1423:2012

### **EVS-EN 15269-7:2009**

#### **Tuletõkke ja/või suitsutõkke uste, luukide ja avatavate akende komplektide, kaasaarvatud nende suluste, tulepüsisvuskatsete tulemuste kasutusulatuse laiendamine. Osa 7: Terasest lükanduksekomplektide tulepüsisvus**

See Euroopa Standard, mida tuleb lugeda koos standardiga prEN 15269-1, katab järgnevad terasest uksekomplektide tüübid: rõhtlükanduksekomplektid (ühe- ja kahepoolsed), teleskoopuksekomplektid (ühe- ja kahepoolsed) ja ühepoolsed püstlükanduksekomplektid (ühe- ja kahepoolsed). See dokument määrab standardi EN 1634-1 kohaselt läbiviidud katse(te) tulemuste kasutusulatuse laiendamise meetodid.

Peatükk 4 kohaselt välja valitud sobiliku katse või katsete laiendatud kasutusulatus võib katta kõiki või mõningaid järgnevast mitte-ammendavast loetelust:

-ainult tervikkuse (E), soojuskiirguse (EW) või soojus-isolatsioonivõime (EI1 või EI2) klassifikatsioonid; - ukse leht; - seina/ lae liikumatud osad (lengi/ riputussüsteem); - ukselehe klaasing; - sulused; - viimistlusmaterjalid; - tuletõkke, suitsutõkke, helitõkke ja soonetihendid; - alternatiivne/alternatiivsed tugitarind(id).

Identne: EN 15269-7:2009

### **EVS-EN 62058-11:2010**

#### **Elektrimõõteseadmed vahelduvvoolule.**

##### **Vastuvõtukontroll. Osa 11:**

##### **Vastuvõtukontrolli üldmeetodid**

Üldised vastuvõtukontrolli meetodid, mis on esitatud IEC 62058 antud osas kehtivad uutele toodetud ja tarnitud elektriarvestite partiile 50 tk ja üle. Siinkohal kirjeldatud protseduure tuleb kasutada vastavushindamisel vastavalt Euroopa Parlamendi Direktiivi 2004/22/EC ning Mõõtevahendite Nõukogu (MID) nõuetele, kasutades:

1) moodulit D, tüübi vastavusdeklaratsioon põhineb tootmisprotsessi omaduste hindamisel: a) lõpptoodangu kontroll ja katsetamine; 2) moodulit F, tüübi vastavusdeklaratsioon põhineb toote taatlemisel: a) iga arvesti vaatlus ja metrooloogiliste näitajate vastavuse hindamine; või b) metrooloogiliste nõuete vastavuse statistiline hindamine; 3) moodulit

H1, vastavusdeklaratsioon põhineb toomise täielikul kvaliteedihindamisel pluss kavandi eksamineerimine: a) lõpptoodangu kontroll ja katsetamine. Kui tootmises kasutatakse F moodulit, siis valitud kontrollimeetod peab vastama nõuetele, mis on esitatud MID Lisa F p 5.3. Vaata alljärgnevat p. 5. See täpsustab, et MID Lisa F p 5.3 nõudeid ei tohi kasutada tihendatud, tavalise ja vähendatud kontrolli üleminekureeglina. Need üleminekureeglid kehtivad ainult kontrollil partiide kaupa kui kindlustatakse tellija adekvaatne kaitse halva kvaliteedi eest ning tagatakse tootjale stiimul valmistada järjekindlalt hea kvaliteediga toodangut.

Identne. IEC 62058-11:2008; EN 62058-11:2010

### **EVS-EN 932-5:2012**

#### **Täitematerjalide üldiste omaduste katsetamine. Osa 5: Üldkasutatavad seadmed ja kalibreerimine**

Standard määrab kindlaks üldised nõuded täitematerjalide omaduste katsetamisel kasutatavatele seadmetele, kalibreerimis- ja kontrollimismeetoditele ning reagentidele. Kontrollimisel võib kasutada ka selles standardis kirjeldatutest erinevaid meetodeid, eeldusel, et vajalik vastavus selles standardis kirjeldatud meetodile on tõendatud. Vaidluste korral tuleb kasutada selles standardis kirjeldatud meetodit.

Identne: EN 932-5:2012

### **EVS-EN ISO 14021:2002/A1:2011**

#### **Keskkonnamärgised- ja teatised.**

##### **Isedeklareeritavad keskkonnaväited (II tüüpi keskkonnamärgistamine) - Muudatus 1 (ISO 14021:1999/Amd 1:2011)**

See rahvusvaheline standard määrab kindlaks toodete puhul keskkonnaväidete, sh seletuste, sümbolite ja graafika nõuded. Lisaks kirjeldab standard keskkonnaväidetes üldiselt kasutatavaid mõisteid ja määratleb nende kasutuse. Samuti kirjeldab rahvusvaheline standard isedeklareeritavate keskkonnaväidete üldist hindamis- ja tõendamismetoodikat ning käesoleva standardi valitud väidete eri hindamis- ja tõendamismeetodeid. Rahvusvaheline standard ei välista, asenda ega muuda mingil viisil seadusjärgselt nõutavat keskkonnateavet, -nõudeid või -märgistamist või mis tahes muid kohaldatavaid õiguslikke nõudeid.

Identne: ISO 14021:1999/Amd 1:2011; EN ISO 14021:2001/A1:2011

#### **FprHD 60364-7-714**

**Madalpingelised elektripaigaldised. Osa 7-714: Nõuded eripaigaldistele ja -paikadele.**

#### **Välisvalgustuspaigaldised**

Standardi IEC 60364 käesoleva osa erinõuded kehtivad kohtkindlate välispaigaldiste osa moodustavate valgustite ja valgustuspaigaldiste valiku ja ehituse kohta. Välisvalgustuspaigaldiste alguspunktiks on elektrivarustusettevõtte elektrijaotuspunkt või välisvalgustuspaigaldise spetsiaalse toiteahela alguspunkt. Nõuded kehtivad näiteks teede, parkide, aedade, avalike kohtade, spordiväljakute ja monumentide valgustuse, tulvavalgustuse, telefonikioskite, autobussi-ootevarjualuste, reklaamitahvlite, linnaplaanide ja liiklusmärkide kohta. Nõuded ei kehti: – avalike tänavavalgustuspaigaldiste kohta, mis kujutavad endast avaliku elektrivõrgu osa; – ajutiste valgusvanikute kohta; – teeliikluse

signalisatsioonisüsteemide kohta; – valgustite kohta, mis on kinnitatud väljapoole ehitist ja mis saavad toidet otse selle ehitise sisejuhistikust. Ujumisbasseinide ja purskkaevude valgustuspaigaldiste kohta vt IEC 60364-7-702.

Identne: IEC 60364-7-714:2011; HD 60364-7-714:2012

#### **FprHD 60364-7-715**

**Madalpingelised elektripaigaldised. Osa 7-715: Nõuded eripaigaldistele ja -paikadele.**

#### **Väikepingelised valgustuspaigaldised**

Standardisarja IEC 60364 käesoleva osa nõuded kehtivad väikepingeliste valgustuspaigaldiste valiku ja ehituse kohta paigaldise toiteallika nimivahelduvpingel kuni 50 V või nimialalispingel kuni 120 V. MÄRKUS 1 Väikepingelise valgustusüsteemi määratlus vt IEC 60598-2-23. MÄRKUS 2 Vahelduvpinged on esitatud efektiivväärtustena.

Identne: IEC 60364-7-715:2011; HD 60364-7-715:2012

## **JUUNIKUUS LAEKUNUD ALGUPÄRASE EESTI STANDARDI KOOSTAMISETTEPANEKUD**

Alljärgnevalt on toodud teave möödunud kuu jooksul Standardikeskusele esitatud algupäraste standardite koostamis-, muutmis- ja uustöötluste panekute kohta, millega algatatakse Eesti standardi koostamisprotsess.

#### **Katuseehitusreeglid (projekt 109098)**

Selles standardis käsitletakse katuseehituse üldisi reegleid.

Standardi uustöötluste koostamisetpaneku esitas Eesti Katuse- ja Fassaadimeistrite Liit (EKFML).

Standardit koostab EKFML poolt moodustatud töörühm ja projektkomitee EVS/PK 45

"Katuseehitusreeglid".

Eeldatav arvamusküsitluse algus on 01.12.2012.

EVS poolne kontaktisik on Kati Käär.

#### **Metallkatuste ehitusreeglid (projekt 109099)**

Selles Eesti standardis käsitletakse metallkatuste ehitusreegleid.

Standardi uustöötluste koostamisetpaneku esitas Eesti Katuse- ja Fassaadimeistrite Liit (EKFML).

Standardit koostab EKFML poolt moodustatud töörühm ja projektkomitee EVS/PK 45

"Katuseehitusreeglid".

Eeldatav arvamusküsitluse algus on 01.12.2012.

EVS poolne kontaktisik on Kati Käär.

#### **Kiudtsementplaadist katuste ehitusreeglid (projekt 109100)**

Selles Eesti standardis käsitletakse kiudtsementplaadist katuste ehitusreegleid.

Standardi uustöötluste koostamisetpaneku esitas Eesti Katuse- ja Fassaadimeistrite Liit (EKFML).

Standardit koostab EKFML poolt moodustatud töörühm ja projektkomitee EVS/PK 45 "Katuseehitusreeglid".

Eeldatav arvamusküsitluse algus on 01.05.2013.

EVS poolne kontaktisik on Kati Käär.

#### **Kivikatuste ehitusreeglid** (projekt 109101)

Selles Eesti standardis käsitletakse kivikatuste ehitusreegleid.

Standardi uustöötamise koostamisetpaneku esitas Eesti Katuse- ja Fassaadimeistrite Liit (EKFML).

Standardit koostab EKFML poolt moodustatud töörühm ja projektkomitee EVS/PK 45

"Katuseehitusreeglid".

Eeldatav arvamusküsitluse algus on 01.05.2013.

EVS poolne kontaktisik on Kati Käär.

## **ETTEPANEK EESTI STANDARDI TÜHISTAMISEKS**

Selles rubriigis avaldame teavet Euroopa standardimisorganisatsioonides algatud Euroopa standardite tühistamisküsitluste kohta. Küsitluse eesmärk on selgitada, kas allviidatud standardite jätkuv kehtimine Eesti ja Euroopa standardina on vajalik.

Allviidatud standardi kehtivana hoidmise vajalikkusest palume teavitada EVS-i standardiosakonda (standardiosakond@evs.ee) hiljemalt **31.07.2012**.

#### **EVS-ISO/IEC 10373-6:2007/A7:2010**

**Identifitseerimiskaardid. Katsemeetodid. Osa 6: Kaugtoimekaardid. Muudatus 7:**

**Katsemeetodid e-passile / Identification cards — Test methods — Part 6: Proximity cards.**

**Amendment 7: Test methods for ePassport**

Identne: ISO/IEC 10373-6:2001/Amd 7:2010

Keel: en

## **TEADE EUROOPA STANDARDI OLEMASOLUST**

Selles rubriigis avaldame teavet Euroopa standardimisorganisatsioonide poolt Standardikeskusele kättesaadavaks tehtud Euroopa standardite ja CENELECI harmoneerimisdokumentide kohta, mida ei avaldata Eesti standardina enne Euroopa organisatsiooni ja Standardikeskuse poolt kokku lepitud dokumendi olemasolust avalikkuse teavitamise hiliseimat tähtpäeva. Reeglina võib selliste teadete avaldamine olla vajalik, et tagada Euroopa standardite jõustumine Eesti standardina samaaegselt nii eesti- kui ka ingliskeelsena.

Igakuiselt uuendatav teave eestikeelsena avaldatavate Eesti standardite kohta, sh eeldatavad kommenteerimise ja avaldamise tähtpäevad, on leitav Standardikeskuse veebilehel avaldatavast standardimisprogrammist. Täiendav teave standardiosakonnast (standardiosakond@evs.ee).

<b>Euroopa standardi tähis</b>	<b>Pealkiri</b>	<b>Eeldatav avaldamise aeg Eesti standardina</b>
HD 60364-7-710:2012	Low-voltage electrical installations - Part 7-710: Requirements for special installations or locations - Medical locations	01.03.2013

HD 60364-7-715:2012	Ehitiste elektripaigaldised. Osa 7-715: Nõuded eripaigaldistele ja paikadele. Väikepingelised valgustuspaigaldised / Low-voltage electrical installations - Part 7-715: Requirements for special installations or locations - Extra-low-voltage lighting installations	01.11.2012
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## JUUNIKUUS KOOSTATUD STANDARDIPARANDUSED

Selles rubriigis avaldame teavet Eesti standardite paranduste koostamise kohta. Standardiparandus koostatakse toimetuskorralduse laadi vigade (trükkivead jms) kõrvaldamiseks standardist. Eesti standardi paranduse tähis koosneb standardi tähisest ja selle lõpu lisatud tähtedest AC.

Nt standardile EVS XXX:YYYY tehtud parandus kannab eraldi avaldatuna tähist EVS XXX:YYYY/AC:ZZZZ. Parandatud standardi tähis reeglina ei muutu.

### Koostatud standardiparandused ja konsolideeritud standardid:

#### **EVS-EN 228/NA:2009/AC:2012**

#### **Mootorikütused. Pliivaba mootoribensiin. Nõuded ja katsemeetodid. Eesti standardi rahvuslik lisa**

Parandus on konsolideeritud standardisse: EVS-EN 228:2008+NA:2009  
EVS-EN 228/NA:2009

Keel: et

#### **EVS-EN 590:2009+A1:2010+NA:2009/AC:2012**

#### **Mootorikütused. Diislikütus. Nõuded ja katsemeetodid**

Parandus on konsolideeritud standardisse: EVS-EN 590:2009+A1:2010+NA:2009

Keel: et

#### **EVS-EN 14214:2008+A1:2009/NA:2010/AC:2012**

#### **Mootorikütused. Rasvhapete metüülestrid (FAME) diiselmootorite jaoks. Nõuded ja katsemeetodid. Eesti standardi rahvuslik lisa**

Parandus on konsolideeritud standardisse: EVS-EN 14214:2008+A1:2009+NA:2010  
EVS-EN 14214:2008+A1:2009/NA:2010

Keel: et

# JUUNIKUUS KINNITATUD JA JUULIKUUS MÜÜGILE SAABUNUD EESTIKEELSE STANDARDID

## **EVS-EN 13145:2005+A1:2011**

### **Raudteealased rakendused. Rööbastee.**

#### **Puitliiprid ja -prussid 10,90**

Eesti standard on Euroopa standardi EN 13145:2001+A1:2011 ingliskeelse teksti sisu poolest identne tõlge eesti keelde.

Standard määratleb raudtee rööbastees kasutatavate puitliiprite ja -prusside puuliigid, kvaliteedinõuded, päritolu, tootmistingimused, kujud, mõõtmed, tolerantsid, vastupidavuse ja immutamise. Standard ei käsitle ostja tellitud viimistlusprotseduure ega kehti teiste raudtee puitkonstruktsioonide kohta.

## **EVS-EN 13232-2:2003+A1:2011**

### **Raudteealased rakendused. Rööbastee.**

#### **Pöörmed ja ristmed. Osa 2: Geomeetrilise konstruktsiooni nõuded 11,67**

Eesti standard on Euroopa standardi EN 13232-2:2003+A1:2011 ingliskeelse teksti sisu poolest identne tõlge eesti keelde.

Standardi see osa käsitleb järgmisi teemasid:

- ratta juhtimisega seostuvad geomeetrilise projekteerimise põhimõtted;
- lähteparametrite põhipiirmäärade definitsioon;
- rakendatavad jõud ja nende piisav toetus;
- tolerantsitasemed.

Eeltoodut on illustreeritud pöörme rakenduse näitel. Pöörmetel esinevad pöörme- ja ristme-komponentide kõik peamised koostisosad ja nende puhul kehtivad põhimõtted on võrdväärselt kohaldatavad ka keerulisematele paigaldistele.

## **EVS-EN 13232-3:2003+A1:2011**

### **Raudteealased rakendused. Rööbastee.**

#### **Pöörmed ja ristmed. Osa 3: Nõuded ratta ja rööpa vahelisele koostoimele 10,90**

Eesti standard on Euroopa standardi EN 13232-3:2003+A1:2011 ingliskeelse teksti sisu poolest identne tõlge eesti keelde.

See standardi osa määratleb:

- ratta ja rööbastee mõõtmete iseloomustuse,
- ratta juhtimisega seonduvad geomeetrilise projekteerimise põhimõtted,

- ratta koormuse ülekandumise projekteerimisprintsiibid,
- otsustuse liigutatavate osadega ristöobaste vajaduseks.

Eeltoodut on illustreeritud vastavate rakendustega pöörme komponentidele:

- pöörangud,
- ristöopad,
- kontrarööpad,

ent standardis kirjeldatud printsiipe kohaldatakse samaväärselt ka keerulisemate paigaldiste puhul.

## **EVS-EN 13232-4:2005+A1:2011**

### **Raudteealased rakendused. Rööbastee.**

#### **Pöörmed ja ristmed. Osa 4: Käitamine, lukustamine ja tuvastamine 11,67**

Eesti standard on Euroopa standardi EN 13232-4:2005+A1:2011 ingliskeelse teksti sisu poolest identne tõlge eesti keelde.

See standard määratleb liidese liikuvate osade ja käitusvahendite, lukustus- ja tuvastus-seadeldiste vahel ning määrab liikuvate osadega pöörmete ja ristmete aluskriteeriumid eelkirjeldatud liidese vaatepunktist.

Standard käsitleb järgmist:

- parameetrite ja piirhälvete kindlaksmääramine liikuvate osade alternatiivsetes asendites;
- liikuvaid osi liikumapanevate ja nende käiku piiravate jõudude kriteeriumid ja piirväärtused.

## **EVS-EN 13232-5:2005+A1:2011**

### **Raudteealased rakendused. Rööbastee.**

#### **Pöörmed ja ristmed. Osa 5: Pöörmed 13,92**

Eesti standard on Euroopa standardi EN 13232-5:2005+A1:2011 ingliskeelse teksti sisu poolest identne tõlge eesti keelde.

See standard käsitleb järgnevat:

- pöörmete ja pöörme koostisosade talitluslik määratlus ning põhilised tüübid;
- pöörmete ja/või pöörmete koostisosade miinimumnõuete määratlemine;
- pöörmekomplektide ja poolpöörmekomplektide ja nende koostisosade ülevaatusel kasutatavate tähistuste ja piirhälvete määratlemine;



- paigaldise piiride ja ulatuse määratlemine;
- pöörmete ja nende osade tuvastamise ja jälgimise meetodite loetelu esitamine;
- pöörmete kirjeldamiseks erisuguste alternatiivsete meetodite loetelu esitamine, kasutades järgmisi parameetreid:
  - pöörmete geomeetria;
  - konstruktsiooni tüübid;
  - talitlusnõuded;
  - projekteerimiskriteeriumid;
  - piirhälbed ja ülevaatus.

**EVS-EN 13232-6:2005+A1:2011**  
**Raudteealased rakendused. Rööbastee.**  
**Pöörmed ja ristmed. Osa 6: Jäigad**  
**teravnurksed ja tõmbid ruströöpad 13,92**

Eesti standard on Euroopa standardi EN 13232-6:2005+A1:2011 ingliskeelse teksti sisu poolest identne tõlge eesti keelde.

See Euroopa standard käsitleb järgmist:

- jääkade ruströöbaste ja nende koostisosade talitluslik määratlus ning põhilised tüübid;
- ristmete kirjeldamiseks erisuguste alternatiivsete meetodite loetelu esitamine, kasutades järgmisi parameetreid:
  - ruströöbaste geomeetria;
  - konstruktsiooni tüübid;
  - projekteerimiskriteeriumid;
  - valmistamisprotsessid;
  - piirhälbed ja ülevaatus.

**EVS-EN 13232-7:2006+A1:2011**  
**Raudteealased rakendused. Rööbastee.**  
**Pöörmed ja ristmed. Osa 7: Liikuvate**  
**osadega ruströöpad 19,05**

Eesti standard on Euroopa standardi EN 13232-7:2006+A1:2011 ingliskeelse teksti sisu poolest identne tõlge eesti keelde.

See osa käsitleb järgmist:

- liikuvate osadega ruströöbaste (ehk ruströöbaste, mille liikuvad osad sulgevad rööpapea servade ühinemiskohtadel tekkivad pilud) ja nende koostisosade talitluslik määratlus ning põhilised tüübid;
- liikuvate osadega ruströöbaste ja/või nende koostisosade valmistamiseks vajalike miinimumnõuete määratlemine;

- liikuvate osadega ruströöbaste ja/või nende koostisosade ülevaatuses vajalike praktiliste eeskirjade formuleerimine;
- paigaldise piiride ja ulatuse määratlemine;
- liikuvate osadega ruströöbaste ja nende konstruktsiooni osade tuvastamise ja jälgimise meetodite loetelu esitamine;
- liikuvate osadega ruströöbaste kirjeldamiseks erisuguste alternatiivsete meetodite loetelu esitamine, kasutades järgmisi parameetreid:
  - ruströöbaste geomeetria;
  - konstruktsiooni tüübid;
  - talitlusnõuded;
  - projekteerimiskriteeriumid;
  - piirhälbed ja ülevaatus.

**EVS-EN 13232-8:2007+A1:2011**  
**Raudteealased rakendused. Rööbastee.**  
**Pöörmed ja ristmed. Osa 8:**  
**Pikenemiskompensaatorid 15,40**

Eesti standard on Euroopa standardi EN 13232-8:2007+A1:2011 ingliskeelse teksti sisu poolest identne tõlge eesti keelde.

Standardi EN 13232 see osa käsitleb järgmisi teemasid: pikenemiskompensaatorite koostisosade ja tüüpide viisi kasutatav talitluslik määratlus; pikenemiskompensaatorite ja nende koostisosade minimaalsete valmistamisnõuete määratlemine; ülevaatus ja piirhälvete praktiliste eeskirjade formuleerimine; pikenemiskompensaatorite ja nende koostisosade tuvastamise ja jälgimise meetodi määratlemine.

**EVS-EN 13232-9:2006+A1:2011**  
**Raudteealased rakendused. Rööbastee.**  
**Pöörmed ja ristmed. Osa 9:**  
**Pöörmerajatised 20,74**

Eesti standard on Euroopa standardi EN 13232-9:2006+A1:2011 ingliskeelse teksti sisu poolest identne tõlge eesti keelde.

Standardi see osa käsitleb järgnevat:

- pöörmete ja ristmete projekteerimisprotsessi kirjeldus ja standardi ülejäänud osade kasutamine;
- paigaldise projekteerimisel arvesse võetavate põhikriteeriumite määratlemine koos ohutuse ja funktsionaalsete mõõtmete ning

geomeetriliste ja materjalist tulenevate aspektidega;

- konstruktsiooni heakskiidumenetluses kontrollitavate põhikriteeriumite määratlemine;
- geomeetriliste ja mitte-geomeetriliste heakskiidukriteeriumite määratlemine nii tehase territooriumil kui ka kliendi marsruudile maha pandud paigaldiste ülevaatuseks, juhul kui paigaldis on tarnitud koostamata, osaliselt koostatuna või „komplektina“;
- tarnitava paigaldise ulatuse määratlemine;
- jälgitavuse miinimumnõuete määratlemine.

Seda standardit rakendatakse üksnes tehase territooriumil või esmakordselt marsruudil koostatud paigaldistele.

Talitlust mõjutavad ka muud aspektid (nt paigaldus- ja hooldustööde läbiviimine); neid selles standardi osas ei vaadelda.

#### **EVS-EN ISO 14175:2008**

##### **Keevitustarvikud. Sulakeevituse ja seonduvate protsesside gaasid ja gaasisegud 8,01**

Eesti standard on Euroopa standardi EN ISO 14175:2008 ingliskeelse teksti sisu poolest identne tõlge eesti keelde.

See rahvusvaheline standard määratleb sulakeevitusel ja seondavatel protsessidel kasutatavate gaaside ja gaasisegude klassifitseerimise nõuded, kaasa arvatud järgmised keevitusprotsessid:

- kaarkeevitus sulamatu elektroodiga (protsess 141);
- kaitsegaas-metallkaarkeevitus (protsess 13);
- plasmakaarkeevitus (protsess 15);
- plasmakaarlõikus (protsess 83);
- laserkeevitus (protsess 52);
- laserlõikus (protsess 84);
- elektrikaarjootmine (protsess 972).

MÄRKUS Sulgudes protsessi number vastavalt standardile ISO 4063.

Selle rahvusvahelise standardi eesmärk on klassifitseerida ja määratleda kaitse-, sh juurekaitse, protsessi- ja abigaasid vastavalt nende keemilistele omadustele ja metallurgilisele käitumisele, mis oleks aluseks kasutajapoolse õige valiku tegemisele ja lihtsustaks võimalikku kvalifikatsiooni protseduuri.

Gaasi puhtus ja gaasisegu piirhälbed määratakse tarnija (valmistaja) poolt tarnimisel, mitte kasutuskoahas.

Gaasid ja gaasisegud võib tarnida vedelas või gaasilises olekus, kuid keevitamisel ja seonduvates protsessides kasutamisel alati gaasilises olekus.

Põlevgaasid, näiteks atsetüleen, maagaas, propaan jne, ja resonatorgaasid, mida kasutatakse gaaslasertes, ei ole selle rahvusvahelise standardiga hõlmatud.

Transport ja gaaside käitlemine ja mahutid peavad olema vastavuses kohalike, riiklike ja regionaalsete standardite ja eeskirjadega.

#### **EVS-EN ISO 520:2010**

##### **Teravili ja kaunvili. 1000 tera massi määramine 8,01**

Eesti standard on Euroopa standardi EN ISO 520:2010 ingliskeelse teksti sisu poolest identne tõlge eesti keelde.

See standard käsitleb tera- ja kaunvilja 1000 tera massi määramise meetodit.

See standard on rakendatav kõigile tera- ja kaunviljadele, välja arvatud külviks määratud seemned.

#### **EVS-ISO 6743-2:2012**

##### **Määrdeained, tööstusõlid ja nendega seotud tooted (klass L). Klassifikatsioon. Osa 2: tüüp F (spindlite laagerdused, tavalagerdused ja sidurid) 4,15**

Eesti standard on rahvusvahelise standardi ISO 6743-2:1981 ingliskeelse teksti sisu poolest identne tõlge eesti keelde.

See ISO 6743 osa kehtestab üksikasjaliku määratluse määrdeainete tüübile F (spindlite laagerdused, tavalagerdused ja sidurid), mis kuulub klassi L (määrdeained, tööstusõlid ja nendega seotud tooted).

Seda ISO 6743 osa on soovituslik lugeda koos standardiga ISO 6743-0.

#### **EVS-ISO 6743-11:2012**

##### **Määrdeained, tööstusõlid ja nendega seotud tooted (klass L). Klassifikatsioon. Osa 11: tüüp P (pneumotööriistad) 4,15**

Eesti standard on rahvusvahelise standardi ISO 6743-11:1990 ingliskeelse teksti sisu poolest identne tõlge eesti keelde.

See ISO 6743 osa kehtestab üksikasjaliku määratluse määrdeainete tüübile P, pneumotööriistad ja pneumosüsteemides kasutatavad seadmed. Mainitud määrdeained kuuluvad

klassi L (määrdeained, tööstusõlid ja nendega seotud tooted).

Klassifikatsioon määratleb vaid suruõhuga kokkupuutuvad määrdeained. Pneumotööriistadel või -seadmetel võib olla ka teisi määrdepunkte (nt laagerdused, hammas-ülekaned jne), mis ei ole kajastatud selles ISO 6743 osas.

Klassifikatsioon kehtib vaid tava käitus- ja keskkonnatingimustes. Kokkupuutel tavatute tingimustega, nt väga kõrge või väga madal temperatuur, tuleb konsulteerida seadme valmistajaga ja/või määrdeaine edasimüüjaga. Seda ISO 6743 osa on soovituslik lugeda koos standardiga ISO 6743-0.

### **EVS-ISO 6743-13:2012**

#### **Määrdeained, tööstusõlid ja nendega seotud tooted (klass L). Klassifikatsioon. Osa 13: tüüp G (juhikud) 4,78**

Eesti standard on rahvusvahelise standardi ISO 6743-13:2002 ingliskeelse teksti sisu poolest identne tõlge eesti keelde.

See ISO 6743 osa kehtestab üksikasjaliku määratluse määrdeainete tüübile G (juhikute määrdeained). Mainitud määrdeained kuuluvad klassi L (määrdeained, tööstusõlid ja nendega seotud tooted).

Seda ISO 6743 osa on soovituslik lugeda koos standardiga ISO 6743-99.

### **EVS-EN ISO 14253-1:1999**

#### **Toote geomeetrilised spetsifikatsioonid (GPS). Töödeldavate detailide ja mõõtevahendite kontrollimine mõõtmete alusel. Osa 1: Spetsifikatsioonile vastavuse või mittevastavuse tõendamise reeglid 8,72**

Eesti standard on Euroopa standardi EN ISO 14253-1:1998 ingliskeelse teksti sisu poolest identne tõlge eesti keelde.

See osa standardist ISO 14253 kehtestab reeglid määratlemaks, kas konkreetse töödeldava detaili või mõõtevahendi karakteristikud on vastavuses või mittevastavuses antud tolerantsiga (töödeldava detaili korral) või maksimaalselt lubatava mõõtehälbega (mõõtevahendi korral), võttes arvesse ka mõõtemääramatust.

Standard esitab ka reeglid, kuidas lahendada olukord, milles ühest otsust (spetsifikatsioonile vastavuse või mittevastavuse kohta) ei ole võimalik teha, s.t kui mõõtetulemus jääb spetsifikatsiooni piire ümbritsevasse määramatuse piirkonda (vt jaotis 3.23).

See osa standardist ISO 14253 rakendub üldistes, s.t ISO/TC 213 koostatud GPS-standardites defineeritud spetsifikatsioonidele (vt ISO/TR 14638), mis hõlmavad:

- töödeldava detaili spetsifikatsioone (harilikult esitatud kui tolerantsi piirid), ja
- mõõtevahendi spetsifikatsioone (harilikult esitatud kui maksimaalselt lubatavad mõõtehälbed).

Standard võib rakenduda ka muudele kui üldistes GPS-standardites defineeritud spetsifikatsioonidele.

Standardi ISO 14253 see osa ei rakendu piirkaliibritega tehtavale kontrollile. Piirkaliibritega inspekteerimist käsitleb ISO/R 1938.

### **EVS-EN 12272-3:2003**

#### **Pindamine. Katsemeetod. Osa 3: Sideaine ja täitematerjali nakkuvuse määramine Vialit-plaadi löökkatsega 10,90**

Eesti standard on Euroopa standardi EN 12272-3:2003 ingliskeelse teksti sisu poolest identne tõlge eesti keelde.

Standard käsitleb sideaine ja täitematerjali vahelise nakke määramist ning pindaktiivsete lisandite või kasutatavate lisainete mõju nakke parameetritele, et aidata kavandada sideaine ja täitematerjali süsteeme pindamiseks. Meetod ei ole ette nähtud kasutamiseks ehitusel kvaliteedikontrolliks.

Standard käsitleb järgmisi mõõtmismeetodeid:

- sideaine mehaaniline nake täitematerjalitera pinnaga;
- sideaine aktiivne nakkuvus puistega;
- mehaanilise nakke ja aktiivse kleepumise parendamine, lisades pindaktiivseid aineid (lisandeid) kas otse sideainesse või piserdades neid sideaine ja puiste vahele;
- sideaine märgamistemperatuur täitematerjali katmiseks;
- nakkuvuse hälbed alla rabedustemperatuuri.

See katsemeetod on sobilik:

- kõikidele süsivesinik-sideainetele, mida kasutatakse pindamistel (nt tavalised või polümeermodifitseeritud sideained, pehmendatud või vedeldatud sideained, tavalised või polümeermodifitseeritud bituumen-emulsioonid);

- kõikidele pindamisel kasutatavatele täitematerjali tüüpidele;
- järgmistele täitematerjali tootefraktsioonidele:
- sõeltekomplekt 1: 2/5 mm, 5/8 mm, 8/11 mm ja 11/16 mm;
- sõeltekomplekt 2: 2/6 mm, 4/6 mm, 6/10 mm ja 10/14 mm.

MÄRKUS Rohkem informatsiooni katse eesmärkide kohta võib leida lisast D.

## JUUNIKUUS MUUDETUD STANDARDITE PEALKIRJAD

Selles jaotises avaldame infot Eesti standardite eesti- ja ingliskeelsete pealkirjade muutmise kohta ja ingliskeelsete pealkirjade tõlkimise kohta.

Lisainformatsioon või ettepanekud standardipealkirjade ebatäpsustest [enquiry@evs.ee](mailto:enquiry@evs.ee)

### Eesti standardite eestikeelsete pealkirjade muutmine:

Standardi tähis	Muudetav pealkiri (et)	UUS pealkiri (et)
EVS-EN ISO 14175:2008	Keevitustarvikud. Sulakeevituse ja seonduvate protsesside kaitsegaasid	Keevitustarvikud. Sulakeevituse ja seonduvate protsesside gaasid ja gaasisegud
EVS-EN ISO 14253-1:1999	Toote geomeetiline kirjeldus. Töödeldavate detailide ja mõõtevahendite kontrollimine mõõtmete alusel. Osa 1: Tehnilistele andmetele vastavuse või mittevastavuse otsustamise eeskirjad	Toote geomeetrised spetsifikatsioonid (GPS). Töödeldavate detailide ja mõõtevahendite kontrollimine mõõtmete alusel. Osa 1: Spetsifikatsioonile vastavuse või mittevastavuse tõendamise reeglid

### Eesti standardite ingliskeelsete pealkirjade tõlkimine eesti keelde:

Standardi tähis	Standardi pealkiri (en)	Standardi pealkiri (et)
EN 55032:2012	Electromagnetic compatibility of multimedia equipment - Emission requirements	Multimeediaseadmete elektromagnetiline ühilduvus. Emissiooni piiramise nõuded
EN 60335-2-25:2012	Household and similar electrical appliances - Safety - Part 2-25: Particular requirements for microwave ovens, including combination microwave ovens	Majapidamis- ja muud taolised elektriseadmed. Ohutus. Osa 2-25: Erinõuded mikrolaineahjudele, sealhulgas kombinatsioon-mikrolaineahjudele
EN 60669-2-6:2012	Switches for household and similar fixed electrical installations - Part 2-6: Particular requirements - Fireman's switches for exterior and interior signs and luminaires	Kohtkindlate majapidamis- ja muude taoliste elektripaigaldiste lülitid. Osa 2-6: Erinõuded. Välis- ja sise-valgusmärkide ja -valgustite tuletõrjelülitid
EN 62196-1:2012	Plugs, socket-outlets, vehicle connectors and vehicle inlets - Conductive charging of electric vehicles - Part 1: General requirements	Pistikud, pistikupesad, sõiduki-pistikühendused ja sõidukisisendid. Elektrisõidukite juhtivuslik laadimine. Osa 1: Üldnõuded

EN 62196-2:2012	Plugs, socket-outlets, vehicle connectors and vehicle inlets - Conductive charging of electric vehicles - Part 2: Dimensional compatibility and interchangeability requirements for a.c. pin and contact-tube accessories	Pistikud, pistikupesad, sõiduki-pistikühendused ja sõidukisisendid. Elektrisõidukite juhtivuslik laadimine. Osa 2: Kontaktsõrmedel ja -pesadel põhinevate vahelduvvooluseadiste mõõtmelise ühilduvuse ja vahetatavuse nõuded
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asuvast ostukorvis [www.evs.ee/POOD](http://www.evs.ee/POOD)