PLAHVATUSOHTLIKUD KESKKONNAD. OSA 38: MAA-ALUSTE KAEVANDUSTE PLAHVATUSOHTLIKUS KESKKONNAS KASUTAMISEKS MÕELDUD SEADMED JA KOMPONENDID

Explosive atmospheres - Part 38: Equipment and components in explosive atmospheres in underground mines (ISO/IEC 80079-38:2016)

EESTI STANDARDIKESKUS
ESTONIAN CENTRE FOR STANDARDISATION

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN ISO/IEC 80079-38:2016 sisaldab Euroopa standardi EN ISO/IEC 80079-38:2016 ingliskeelset teksti.	This Estonian standard EVS-EN ISO/IEC 80079-38:2016 consists of the English text of the European standard EN ISO/IEC 80079-38:2016.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 21.12.2016.	Date of Availability of the European standard is 21.12.2016.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO/IEC 80079-38

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Supersedes EN 1710:2005+A1:2008

English Version

Explosive atmospheres - Part 38: Equipment and components in explosive atmospheres in underground mines (ISO/IEC 80079-38:2016)

Atmosphères explosives - Partie 38: Appareils et composants destinés à être utilisés dans les mines souterraines grisouteuses (ISO/IEC 80079-38:2016)

Explosionsfähige Atmosphären - Teil 38: Geräte und Komponenten in explosionsfähigen Atmosphären in untertägigen Bergwerken (ISO/IEC 80079-38:2016)

This European Standard was approved by CEN on 18 February 2016.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.

EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

European foreword

This document (EN ISO/IEC 80079-38:2016) has been prepared by subcommittee 31M: Nonelectrical equipment and protective systems for explosive atmospheres, of IEC technical committee 31: Equipment for explosive atmospheres" in collaboration with Technical Committee CEN/TC 305 "Potentially explosive atmospheres - Explosion prevention and protection" the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by June 2017, and conflicting national standards shall be withdrawn at the latest by June 2017.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

The significant changes with respect to EN 1710+A1:2008 are included in Annex ZC "Significant changes between this European Standard and EN 1710+A1:2008".

This document supersedes EN 1710:2005+A1:2008.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s) 2014/34/EU and 2006/42/EC.

For relationship with EU Directives, see informative Annex ZA and ZB, which are integral parts of this document.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO/IEC 80079-38:2016 has been approved by CEN as EN ISO/IEC 80079-38:2016 without any modification.

Annex ZA
(informative)

Relationship between this European Standard and the Essential Requirements of EU Directive 2014/34/EU

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association to provide a means of conforming to Essential Requirements of the New Approach Directive 2014/34/EU

Once this standard is cited in the Official Journal of the European Union under that Directive and has been implemented as a national standard in at least one Member State, compliance with the clauses of this standard given in Table ZA.1 confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding Essential Requirements of that Directive and associated EFTA regulations.

Table ZA.1 — Correspondence between this European Standard and Directive 2014/34/EU

Clause(s)/sub-clause(s) of this EN	Essential Requirements (ERs) of Directive 2014/34/EU	Qualifying remarks/Notes
4; 5	1.0.1	EN ISO 80079-36
4; 5	1.0.2	
6.2; 6.3	1.0.3	
4.1; 5.1.2; 5.1.3	1.0.4	EN ISO 80079-36
8	1.0.5	EN ISO 80079-36
7.2	1.0.6	
4; 4.1; 5.3	1.1.1	EN ISO 80079-36, EN 60079-0
4.1; 4.3; 5.4; 5.5; 5.6; 5.7; 5.9	1.1.2	EN ISO 80079-36, EN 60079-0, IEC 60204-1
4.1	1.1.3	EN ISO 80079-36, EN 60079-0
4.1	1.2.1	
4	1.2.4	
4	1.2.5	
7.1	1.2.6	EN ISO 80079-36, EN 60079-0
1; 4.4; 5.3.1.7; 5.8	1.2.7 a)	EN 60204-1, EN 60204-11 and standards supporting Directive 98/37/EC deal with this subject
1; 4.1; 4.2.3; 4.4.3.1; 5.4.2; 5.5; 5.6; 5.7; 5.9; 6.1; C.8; C.9; C.10	1.2.7 b)	
1; 4.2; 6.2	1.2.7 c)	EN ISO 80079-36
1; 4.4.3; 5.8	1.2.7 d)	
4.1; 4.2; 4.3; 5.3.1.7; 5.4.1; 5.4.2;	1.2.8	

Clause(s)/sub-clause(s) of this EN	Essential Requirements (ERs) of Directive 2014/34/EU	Qualifying remarks/Notes
5.4.6		
4.3; 4.4	1.2.9	EN ISO 80079-36, EN 60079-1
1; 4.1; 4.2.3; 4.4.3.1; 5.1; 5.4.2; 5.4.3; 5.5; 5.6; 5.7; 6.1; 7.2	1.3.1	
4.1; 4.4.6.2; 5.3.2; 5.4.1; 5.4.5; 6.6; C.6	1.3.2	EN ISO 80079-36, EN 60079-0
4.1; 4.4.6; C.4; C.5	1.3.3	EN 60204-1, EN 60204-11
5.3.1.7; 5.4.2	1.3.4	EN 60204-1, EN 60204-11
	1.4.1	External effects are the subject of agreement between the manufacturer and user.
4.1	1.4.2	Resistance to chemical attack is subject to agreement between the manufacturer and user.
5.4.1; 5.7.1; 5.8	1.5.1 to 1.5.8	EN ISO 80079-37 and standards supporting the use of Work Equipment Directive (95/63/EC)
5.4.1	1.6.1 to 1.6.5	
1 (not applicable)	2.0.1	
1; 4; 5	2.0.2	EN ISO 80079-36, EN 60079-0
1; 4; 5	2.0.2.1	EN ISO 80079-36, EN 60079-0
7.1	2.0.2.2	
1 (not applicable)	2.0.2.3	
1 (not applicable)	2.1	
1 (not applicable)	2.2	
1 (not applicable)	2.3	

WARNING — Other requirements and other EU Directives may be applicable to the product(s) falling within the scope of this standard.

Annex ZB
(informative)

Relationship between this European Standard and the Essential Requirements of EU Directive 2006/42/EC

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association to provide a means of conforming to Essential Requirements of the New Approach Directive 2006/42/EC.

Once this standard is cited in the Official Journal of the European Communities under that Directive and has been implemented as a national standard in at least one Member State, compliance with the normative clauses of this standard confers, within the limits of the scope of this standard, a presumption of conformity with Essential Requirement 1.5.7 of that Directive and associated EFTA regulations.

WARNING — Other requirements and other EU Directives may be applicable to the product(s) falling within the scope of this standard.

Annex ZC
(informative)

Significant technical changes between this document and the previous edition of this European Standard

This European Standard replaces EN 1710+A1:2008.

Table ZC.1 — Significant technical changes between this document and EN 1710+A1:2008

Significant changes	Clause	Type		
		Minor and editorial changes	Extension	Major technical changes
Normative references updated, especially references on CEN/CENELEC and their publications changed into references on international available publications	all clauses	X		
Terms and definitions has been amended.	3		X	
Ignition hazard assessment added (Clauses related to mining equipment adopted from ISO 80079-36)	4	X		
Requirements for electric cable configurations expanded	4.4.6		X	
Requirements for impellers and impeller rings expanded	5.3.1.4		X	
Requirements for brakes added	5.7		X	
Requirements for optical fibres used on machines and electromagnetic radiation from components on machines added	5.9		X	
Requirements for hydraulic and pneumatic equipment added	6.3		X	
Requirements for cable-reeled equipment expanded	6.4		X	
Marking of equipment changed in accordance with ISO 80079-36	8		X	
Annex C „Ignition sources“ added	Annex C		X	
Annex D „Guidance on potential risks for converter-fed motors“added	Annex D		X	
Annex E „ Tests for surface protective coating for group I hand tools of EPL Mb “added	Annex E		X	

Explanations:

A) Definitions

Minor and editorial changes clarification
decrease of technical requirements
minor technical change
editorial corrections

Changes in a standard classified as 'Minor and editorial changes' refer to changes regarding the previous standard, which modify requirements in an editorial or a minor technical way. Also changes of the wording to clarify technical requirements without any technical change are classified as 'Minor and editorial changes'.

A reduction in level of existing requirement is also classified as 'Minor and editorial changes'

Extension addition of technical options

Changes in a standard classified as 'extension' refers to changes regarding the previous standard, which add new or modify existing technical requirements, in a way that new options are given, but without increasing requirements for equipment that was fully compliant with the previous standard. Therefore these 'extensions' will not have to be considered for products in conformity with the preceding edition.

Major technical changes addition of technical requirements
increase of technical requirements

Changes in a standard classified as 'Major technical change' refer to changes regarding the previous standard, which add new or increase the level of existing technical requirements, in a way that a product in conformity with the preceding standard will not always be able to fulfil the requirements given in the standard. 'Major technical changes' have to be considered for products in conformity with the preceding edition. For every change classified as 'Major Technical Change' additional information is provided in clause B) of the Annex ZC.

NOTE These changes represent current technological knowledge[1]. However, these changes should not normally have an influence on equipment already placed on the market.

B) Information about the background of 'Major Technical Changes'

None

[1] see also ATEX Guide 10.3 and Annex ZA

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