

**Kaheotstarbelised hüdraulilised päästevahendid
tuletõrjutele ja päästemeeskondadele. Ohutus- ja
toimimismõuded KONSOLIDEERITUD TEKST**

**Double acting hydraulic rescue tools for fire and rescue
service use - Safety and performance requirements
CONSOLIDATED TEXT**

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 13204:2005+A1:2012 sisaldab Euroopa standardi EN 13204:2004+A1:2012 ingliskeelset teksti.	This Estonian standard EVS-EN 13204:2005+A1:2012 consists of the English text of the European standard EN 13204:2004+A1:2012.
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English Version

**Double acting hydraulic rescue tools for fire and rescue service
use - Safety and performance requirements**

Matériels hydrauliques de désincarcération à double effet à
usage des services d'incendie et de secours - Prescriptions
de sécurité et de performance

Doppelt wirkende hydraulische Rettungsgeräte für die
Feuerwehr und Rettungsdienste - Sicherheits- und
Leistungsanforderungen

This European Standard was approved by CEN on 27 October 2004 and includes Amendment 1 approved by CEN on 13 May 2012.

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
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Foreword



This document (EN 13204:2004+A1:2012) has been prepared by Technical Committee CEN/TC 192 “ Fire and rescue service equipment ”, the secretariat of which is held by BSI.

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of an identical text or by endorsement, at the latest by December 2012, and conflicting national standards shall be withdrawn at the latest by December 2012.

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.

This document includes Amendment 1, approved by CEN on 2012-05-13.

This document supersedes EN 13204:2004.

The start and finish of text introduced or altered by amendment is indicated in the text by tags  .

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).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

This document includes a Bibliography.

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, 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.

Introduction

This document is a type C standard as stated in EN 1070.

The machinery concerned and the extent to which hazards, hazardous situations and events are covered are indicated in the scope of this document.

When provisions of this type C standard are different from those which are stated in type A or B standards, the provisions of this type C standard take precedence over the provisions of the other standards, for machines that have been designed and built according to the provisions of this type C standard.

When compiling this document, it was assumed that:

- a) the manufacturer shall design and/or use components without specific requirements in accordance with the usual engineering practice and calculation codes, including all failure modes;
- b) only trained and competent persons whilst wearing gloves (which comply to EN 659), will use and operate the machinery;
- c) the machinery is kept in good repair and working order, so that the required characteristics remain despite wear;
- d) the working place is adequately lit;
- e) negotiations occur between the manufacturer and the purchaser concerning particular conditions for the use and places of use for the machinery related to health and safety.

1 Scope

This document deals with the technical requirements to minimise the risks of hazards listed in Clause 4 which can arise during the operation and/or maintenance of double acting hydraulic rescue tool systems, when carried out as intended by the manufacturer or his authorised representative.

All the safety requirements of this document apply to double acting hydraulic rescue tools manufactured after the date of publication.

Double acting hydraulic rescue tool systems are intended for use by the fire fighting and rescue services, principally for cutting through, spreading or pushing apart the structural parts of road vehicles, ships, trains, aircraft's and building structures involved in accidents. They consist, as defined in Clause 3 of a separate power pack, the tool[s] and the necessary interconnections and intended accessories.

NOTE 1 The aim is to assist whilst extracting the casualties or to create a working space for paramedical services taking the local conditions into account.

This document does not establish the additional requirements for:

- a) operation in severe conditions (e.g. extreme environmental conditions such as: temperatures outside the range $-20\text{ }^{\circ}\text{C}$ $+55\text{ }^{\circ}\text{C}$, corrosive environment, tropical environment, contaminating environments, strong magnetic fields, potentially explosive atmospheres);
- b) the risk directly arising from the means provided for the portability, transportability and mobility of double-acting hydraulic rescue tools during periods of their operation.

NOTE 2 For the EU/EEA other Directives can be applicable to the equipment in the scope, for example the Electro Magnetic Compatibility Directive.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 563, *Safety of machinery — Temperatures of touchable surfaces — Ergonomics data to establish temperature limit values for hot surfaces*

EN 659, *Protective gloves for firefighters*

EN 837-1, *Pressure gauges — Part 1: Bourdon tube pressure gauges — Dimensions, metrology, requirements and testing*

EN 853, *Rubber hoses and hose assemblies — Wire braid reinforced hydraulic type — Specification*

EN 854, *Rubber hoses and hose assemblies — Textile reinforced hydraulic type — Specification*

EN 855, *Plastic hoses and hose assemblies — Thermoplastics textile reinforced hydraulic type — Specification*

EN 856, *Rubber hoses and hose assemblies — Rubber-covered spiral wire reinforced hydraulic type — Specification*

EN 857, *Rubber hoses and hose assemblies — Wire braid reinforced compact type for hydraulic applications — Specification*

EN 953, *Safety of machinery — Guards — General requirements for the design and construction of fixed and movable guards*

EN 982, *Safety of machinery — Safety requirements for fluid power systems and their components — Hydraulics*

EN 1050:1996, *Safety of machinery — Principles for risk assessment*

EN 1070:1998, *Safety of machinery — Terminology*

EN 10025-1:2004, *Hot rolled products of structural steels — Part 1: General technical delivery conditions*

EN 10210-2, *Hot finished structural hollow sections of non-alloy and fine grain structural steels. — Part 2: Tolerances, dimensions and sectional properties*

EN 13202, *Ergonomics of the thermal environment — Temperatures of touchable hot surfaces — Guidance for establishing surface temperature limit values in production standards with the aid of EN 563*

EN 60204-1, *Safety of machinery — Electrical equipment of machines — Part 1: General requirements*

EN 60529, *Degrees of protection provided by enclosures (IP codes)*

EN ISO 1402, *Rubber and plastic hoses and hose assemblies — Hydrostatic testing (ISO 1402:1994)*

EN ISO 1746, *Rubber or plastics hoses and tubing — Bending tests (ISO 1746:1998, including technical corrigendum 1:1999)*

EN ISO 3744:2010, *Acoustics — Determination of sound power levels and sound energy levels of noise sources using sound pressure — Engineering methods for an essentially free field over a reflecting plane (ISO 3744:2010) (A1)*

EN ISO 4871, *Acoustics — Declaration and verification of noise emission values of machinery and equipment (ISO 4871:1996)*

EN ISO 7751:1997, *Rubber and plastic hoses and hose assemblies — Ratios of proof and burst pressure to design working pressure (ISO 7751:1991)*

EN ISO 11201, *Acoustics — Noise emitted by machinery and equipment — Determination of emission sound pressure levels at a work station and at other specified positions in an essentially free field over a reflecting plane with negligible environmental corrections (ISO 11201) (A1)*

EN ISO 11688-1, *Acoustics — Recommended practice for the design of low-noise machinery and equipment — Part 1: Planning (ISO/TR 11688-1:1995)*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 1070:1998 and the following apply.

3.1

accessories

additional attachable parts that are used to adapt a tool enabling it to perform a certain special task, e.g.: pulling attachments, manifolds, saddles, extension tubes, etc.

3.2

detachable parts

parts or components that can be removed by hand (without tools) under no load conditions