

**Tsiviilkäibes olevad lõhkeained.
Detoneernöörid ja süütenöörid. Osa 11:
Detoneernööride detonatsioonikiiruse
määramine**

Explosives for civil uses - Detonating cords and
safety fuses - Part 11: Determination of velocity of
detonation of detonating cords

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 13630-11:2002 sisaldab Euroopa standardi EN 13630-11:2002 ingliskeelset teksti. Käesolev dokument on jõustatud 18.10.2002 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN 13630-11:2002 consists of the English text of the European standard EN 13630-11:2002. This document is endorsed on 18.10.2002 with the notification being published in the official publication of the Estonian national standardisation organisation. The standard is available from Estonian standardisation organisation.
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Käsitlusala: This European Standard specifies a method for determining the velocity of detonation of detonating cords.	Scope: This European Standard specifies a method for determining the velocity of detonation of detonating cords.
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ICS 71.100.30

Võtmesõnad: detonating fuses, detonation, explosives, igniters, ignition time, ignitor, inflammable matters, materials testing, mining, priming line, safety, specimen preparation, testing, testing devices, velocity, velocity measurement

ICS 71.100.30

English version

Explosives for civil uses - Detonating cords and safety fuses - Part 11: Determination of velocity of detonation of detonating cords

Explosifs à usage civil - Cordeaux détonants et mèches de
sûreté - Partie 11: Détermination de la vitesse de
détonation des cordeaux détonants

Explosivstoffe für zivile Zwecke - Sprengschnüre und
Sicherheitsanzündschnüre - Teil 11: Bestimmung der
Detonationsgeschwindigkeit von Sprengschnüren

This European Standard was approved by CEN on 11 July 2002.

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 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.



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COMITÉ EUROPÉEN DE NORMALISATION
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Foreword

This document (EN 13630-11:2002) has been prepared by Technical Committee CEN/TC 321 "Explosives for civil uses", the secretariat of which is held by AENOR.

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 March 2003, and conflicting national standards shall be withdrawn at the latest by March 2003.

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 European Standard is one of a series of standards on *Explosives for civil uses – Detonating cords and safety fuses*. The other parts of this series are:

prEN 13630-1	<i>Part 1: Requirements.</i>
EN 13630-2	<i>Part 2: Determination of thermal stability of detonating cords and safety fuses.</i>
EN 13630-3	<i>Part 3: Determination of sensitiveness to friction of the core of detonating cords.</i>
EN 13630-4	<i>Part 4: Determination of sensitiveness to impact of detonating cords.</i>
prEN 13630-5	<i>Part 5: Determination of resistance to abrasion of detonating cords.</i>
EN 13630-6	<i>Part 6: Determination of the resistance to tension of detonating cords.</i>
EN 13630-7	<i>Part 7: Determination of reliability of initiation of detonating cords.</i>
EN 13630-8	<i>Part 8: Determination of resistance to water of detonating cords and safety fuses.</i>
prEN 13630-9	<i>Part 9: Determination of transmission of detonation from detonating cord to detonating cord.</i>
WI 00321088	<i>Part 10: Determination of initiating capability of detonating cords.</i>
EN 13630-12	<i>Part 12: Determination of burning duration of safety fuses.</i>

Annex A of this document is informative.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This European Standard specifies a method for determining the velocity of detonation of detonating cords.

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text, and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

prEN 13763-15, *Explosives for civil uses - Detonators and relays — Part 15: Determination of equivalent initiating capability*.

prEN 13857-1:2001, *Explosives for civil uses — Part 1: Terminology*.

EN ISO/IEC 17025, *General requirements for the competence of testing and calibration laboratories (ISO/IEC 17025:1999)*.

3 Terms and definitions

For the purposes of this European Standard, the terms and definitions given in prEN 13857-1:2001 apply.

4 Apparatus

4.1 Sensors

Two sensors, for detecting the detonation wave: for example, two enamel insulated twisted copper wires or an optical system.

4.2 Time-measuring equipment

Time-measuring equipment, capable of measuring time to an accuracy of $\pm 1 \mu\text{s}$.

4.3 Detonator

A detonator of equivalent initiating capability as specified by the manufacturer of the detonating cord, in accordance with prEN 13763-15, shall be used to initiate the detonating cord.

5 Test pieces

Select eight test pieces of $(1\,500 \pm 50)$ mm length.

6 Procedure

Tape the detonator to the detonating cord at a distance of (25 ± 5) mm from one end of the detonating cord (see Figure 1), or in a manner specified by the manufacturer.

Clamp the detonating cord and the detonator horizontally between two supports at a height of at least 200 mm above the ground.