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Temporära konstruktioner – Skyddsnät – Del 1: Säkerhetskrav och provningsmetoder

Temporary works equipment – Safety nets – Part 1: Safety requirements, test methods

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Europastandarden EN 1263-1:2014 gäller som svensk standard. Detta dokument innehåller den officiella engelska versionen av EN 1263-1:2014.

Denna standard ersätter SS-EN 1263-1, utgåva 2.

The European Standard EN 1263-1:2014 has the status of a Swedish Standard. This document contains the official version of EN 1263-1:2014.

This standard supersedes the Swedish Standard SS-EN 1263-1, edition 2.

Upplysningar om sakinnehållet i standarden lämnas av SIS, Swedish Standards Institute, telefon 08-555 520 00. Standarder kan beställas hos SIS Förlag AB som även lämnar allmänna upplysningar om svensk och utländsk standard.

Information about the content of the standard is available from the Swedish Standards Institute (SIS), telephone +46 8 555 520 00. Standards may be ordered from SIS Förlag AB, who can also provide general information about Swedish and foreign standards.

Denna standard är framtagen av kommittén för Byggnadsställningar, SIS/TK 173.

Har du synpunkter på innehållet i den här standarden, vill du delta i ett kommande revideringsarbete eller vara med och ta fram andra standarder inom området? Gå in på www.sis.se - där hittar du mer information.

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 1263-1

December 2014

ICS 13.340.60

Supersedes EN 1263-1:2002

English Version

Temporary works equipment - Safety nets - Part 1: Safety requirements, test methods

Équipements temporaires de chantiers - Filets de sécurité - Partie 1 : Exigences de sécurité, méthodes d'essai

Temporäre Konstruktionen für Bauwerke - Schutznetze (Sicherheitsnetze) - Teil 1: Sicherheitstechnische Anforderungen, Prüfverfahren

This European Standard was approved by CEN on 8 November 2014.

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.

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EUROPÄISCHES KOMITEE FÜR NORMUNG

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Foreword

This document (EN 1263-1:2014) has been prepared by Technical Committee CEN/TC 53 “Temporary works equipment”, 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 2015 and conflicting national standards shall be withdrawn at the latest by June 2015.

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 supersedes EN 1263-1:2002.

This European Standard is one of a series of standards as listed below:

— EN 1263-1, *Temporary works equipment — Safety nets — Part 1: Safety requirements, test methods*

— EN 1263-2, *Temporary works equipment — Safety nets — Part 2: Safety requirements for the erection of safety nets*

The significant changes incorporated in this revision are:

a) replacement of Figure 4;

b) addition of a new rope denominated “W” in Table 2;

c) deletion of designation for nets;

d) change of designation for ropes;

e) complete revision of Clause 7 (test methods), incorporation of the description of a new vertical test rig and new figures for the mash samples;

f) revision of dimensional inspection of the mesh size;

g) replacement of Figure 9 and Figure 10 with new figures in 7.7.4.2 (interpretation of the results).

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.

Introduction

Safety nets for use in construction and other assembly work, e.g. as devices to catch falling persons during the construction of halls and bridges, in open line construction as side protection, as anti-fall devices or devices to catch falling persons on working scaffolds, as side protection for safety scaffolds at roofs and in tunnelling can be chosen as a technically suitable and economic solution to catch persons falling from a height. They serve to protect from deeper falls even when large areas in plan occur.

In contrast to being secured by personal protective equipment against falls from heights the mobility of persons working above the area protected by safety nets is not impaired during all work activity. Moreover, the use of safety nets has the advantage to catch persons falling from a height more softly than lanyards caused by large plastic deformations of the net.

Attention should be paid to the fact that the ageing sensitivity of safety nets due to exposure to UV requires that they are exposed to open air condition a limited time only and then be withdrawn from service. For the evaluation of the ageing behaviour tests have been carried out over a period between 6 months and 24 months which apply to the most commonly used materials polyamide and polypropylene. The specifications of the limit values of breaking energy are based on these tests and on drop tests with articulated dummies and test spheres. After having been subjected to respective loading by persons falling from height the safety nets should be replaced, if appropriate.

1 Scope

This European Standard applies to safety nets and their accessories for use in construction and assembly work to protect from deeper fall. It specifies safety requirements and test methods and is based on the performance characteristics of polypropene and polyamide fibres. Materials used in nets should have no significant reduction in mechanical properties between –10 °C and +40 °C.

This European Standard is not applicable to the installation of safety nets. For a European Standard covering the installation of safety nets, see EN 1263-2.

2 Normative references

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

EN 1263-2:2014, *Temporary works equipment — Safety nets — Part 2: Safety requirements for the erection of safety nets*

EN ISO 1806, *Fishing nets — Determination of mesh breaking force of netting (ISO 1806)*

EN ISO 2307, *Fibre ropes — Determination of certain physical and mechanical properties (ISO 2307)*

EN ISO 4892-1, *Plastics — Methods of exposure to laboratory light sources — Part 1: General guidance (ISO 4892-1)*

EN ISO 7500-1, *Metallic materials — Verification of static uniaxial testing machines — Part 1: Tension/compression testing machines — Verification and calibration of the force-measuring system (ISO 7500-1)*

ISO 554, *Standard atmospheres for conditioning and/or testing — Specifications*

3 Symbols and terms and definitions

3.1 Symbols

The mainly used symbols are given in Table 1.

Table 1 — Main symbols

Number	Symbol	Denomination	Unit
1	γ_1	general safety factor for production and handling of the material; γ_1 = 1,5	—
2	γ_2	specific coefficient for the deterioration due to ageing, see 7.7 or 7.8, γ_2 never less than 1 and shows at least 12 months service life	—
3	l_M	mesh size	mm
4	E_A	action value of energy for a net of class A (characteristic value)	kJ
5	E_B	action value of energy for a net of class B (characteristic value)	kJ
6	E_0	value of breaking energy under reference conditions obtained from the recorded data of a net sample in the as new state	kJ
7	E_{12}	calculated value of breaking energy under reference conditions of a net sample after 12 months of ageing	kJ
8	E_6	calculated value of breaking energy as of a net sample after six month of ageing	kJ
9	E_{vi}	from recorded test data calculated value of energy capacity of the mesh sample i subjected to ageing adjacent to the maximum tensile force F_{vi}	J
10	E_{oj}	from recorded test data calculated value of energy capacity of the mesh sample j in the as new state adjacent to the maximum tensile force F_{vj}	J
11	A_{vi}	definite integral in the interval $0 \leq \Delta v \leq \Delta v_{vi}$ obtained from the recorded data of the breaking test with the mesh sample i subjected to ageing, see Figure 12	cm^2
12	A_{oj}	definite integral in the interval $0 \leq \Delta v \leq \Delta v_{0j,}$ obtained from the recorded data of the breaking test with the mesh sample j in the as new state, see Figure 13	cm^2
13	F_{vi}	recorded maximum tensile force of the mesh sample i subjected to ageing	N
14	F_{oj}	recorded maximum tensile force of the mesh sample j in the as new state	N
15	Δv_{vi}	extension at maximum tensile force F_{vi} of the mesh sample i (i = 1,…,10) subjected to ageing	m
16	Δv_{oj}	extension at maximum tensile force F_{oj} of the mesh sample j (j = 1,…,10) in the as new state	m
NOTE “as new state” means: of the same properties as a new one.			