SLOVENSKI STANDARD
SIST EN 10108:2004

01-december-2004

Okrogle jeklene palice za hladno nakrļ evanje in hladno iztiskovanje ï Mere in tolerance

Round steel rod for cold heading and cold extrusion - Dimensions and tolerances

Runder Walzdraht aus Kaltstauch- und Kaltfließpressstählen - Maße und Grenzabmaße

Fil machine rond en acier pour déformation à froid et extrusion à froid - Dimensions et tolérances

Ta slovenski standard je istoveten z: EN 10108:2004

ICS:

77.140.65	Jeklene žice, jeklene vrvi in verige	Steel wire, wire ropes and link chains

SIST EN 10108:2004 **en**

EUROPEAN STANDARD

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Round steel rod for cold heading and cold extrusion - Dimensions and tolerances

Fil machine rond en acier pour déformation à froid et extrusion à froid - Dimensions et tolérances

Runder Walzdraht aus Kaltstauch-und kaltfließpressstählen - Maße und Grenzabmaße

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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 Central Secretariat has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
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Content

page

Foreword

This document (EN 10108:2004) has been prepared by Technical Committee ECISS/TC 15 “Wire rod - Qualities, dimensions, tolerances and specific tests”, the secretariat of which is held by UNI.

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of an identical text or by endorsement, at the latest by April 2005, and conflicting national standards shall be withdrawn at the latest by April 2005.

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).

This document supersedes EURONORM 108:1972.

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

1 Scope

This document specifies the dimensions, the tolerances, the nominal cross-sections and the nominal masses of the round rod used for cold heading and cold extrusion.

This document concerns the round rod in non alloy and alloy steel grades specified in European Standard EN 10263 parts 1 to 5.

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 10021, *General technical delivery requirements for steel and iron products*

EN 10079:1992, *Definition of steel products*

EN 10088-1, *Stainless steels – Part 1: List of stainless steels*

EN 10263-1, *Steel rod, bars and wire for cold heading and cold extrusion - Part 1: General technical delivery conditions*

EN 10263-2, *Steel rod, bars and wire for cold heading and cold extrusion - Part 2: Technical delivery conditions for steels not intended for heat treatment after cold working*

EN 10263-3, *Steel rod, bars and wire for cold heading and cold extrusion - Part 3: Technical delivery conditions for case hardening steels*

EN 10263-4, *Steel rod, bars and wire for cold heading and cold extrusion - Part 4: Technical delivery conditions for steels for quenching and tempering*

EN 10263-5, *Steel rod, bars and steel wire for cold heading and cold extrusion - Part 5: Technical delivery conditions for stainless steels*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 10079:1992 apply.

4 Information to be supplied by the purchaser

4.1 The following information shall be supplied by the purchaser at the time of enquiry and order, to enable the supplier to comply satisfactorily with the requirements of this document:

a) quantity to be delivered

b) product denomination (rod)

c) reference to this document

d) nominal dimensions in millimetres

e) type of tolerance A or B

f) if needed the winding direction of the coil

g) the information included in EN 10263-1, EN 10263-2, EN 10263-3, EN 10263-4 and EN 10263-5.

4.2 Example

Rod with a diameter of 10 mm with tolerances type B in steel C10C according EN 10263-2:

EXAMPLE Rod EN 10108 - 10 B - EN 10263-2 - C10C

5 Requirements

The coils are wound in a clockwise direction unless otherwise agreed in the order.

6 Nominal sections and nominal masses

The values for sections and masses are shown in Tables 1 and 2 and are given as a guide.

They have been calculated and rounded off on the basis of nominal diameters and a density of 7,85 kg/dm$^{3.}$

For stainless steels to calculate the nominal mass, densities should be obtained from EN 10088-1.

7 Dimensions and Tolerances

Table 1 — Dimensions, tolerances, nominal section and nominal mass - (Class A tolerances)

Nominal diameter *d* (mm)	Tolerance (mm)	Nominal section (mm^2)	Nominal mass [a] (kg/m)
5,00	±0,20	19,63	0,154
5,50		23,76	0,187
6,00		28,27	0,222
6,50		33,18	0,260
7,00		38,48	0,302
7,50		44,18	0,347
8,00		50,26	0,395
8,50		56,74	0,445
9,00		63,62	0,499
9,50		70,88	0,556
10,00		78,54	0,617
10,50	±0,25	86,59	0,680
11,00		95,03	0,746
11,50		103,9	0,816
12,00		113,1	0,888
12,50		122,7	0,963
13,00		132,7	1,04
13,50		143,1	1,12
14,00		153,9	1,21
14,50		165,1	1,30
15,00		176,7	1,39
15,50		188,7	1,48
16,00	±0,30	201,1	1,58
16,50		213,8	1,68
17,00		227,0	1,78
17,50		240,5	1,89
18,00		254,5	2,00
18,50		268,8	2,11
19,00		283,5	2,23
19,50		298,6	2,34
20,00		314,1	2,47
20,50		330,1	2,59
21,00		346,3	2,72
21,50		363,1	2,85

(continued)

Table 1 — Dimensions, tolerances, nominal section and nominal mass - (Class A tolerances)

(concluded)

Nominal diameter *d* (mm)	Tolerance (mm)	Nominal section (mm^2)	Nominal mass [a] (kg/m)
22,00	±0,35	380,1	2,98
22,50		397,6	3,12
23,00		415,5	3,26
23,50		433,5	3,40
24,00		452,4	3,55
24,50		471,4	3,70
25,00		490,9	3,85
26,00		530,9	4,17
27,00		572,6	4,49
28,00		615,7	4,83
29,00		660,5	5,18
30,00		706,9	5,55
31,00	±0,40	754,4	5,93
32,00		803,8	6,31
33,00		854,9	6,71
34,00		907,5	7,13
35,00		961,6	7,55
36,00		1017,4	7,99
37,00		1074,7	8,44
38,00		1133,5	8,90
39,00		1194	9,38
40,00		1256	9,87
41,00	±0,50	1319,6	10,36
42,00		1384,7	10,88
43,00		1451,5	11,40
44,00		1519,7	11,93
45,00		1589.6	12,49
46,00		1661,1	13,05
47,00		1734,1	13,62
48,00		1808,7	14,20
49,00		1884,8	14,80
50,00		1962,5	15,41

[a] For stainless steels these nominal masses shall be adjusted according to the steel densities given in EN 10088-1