



**SLOVENSKI STANDARD**  
**SIST EN 10017:2004**

**01-december-2004**

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Steel rod for drawing and/or cold rolling - Dimensions and tolerances

Walzdraht aus Stahl zum Ziehen und/oder Kaltwalzen - Maße und Grenzabmaße

**iTeh STANDARD PREVIEW**

Fil machine en acier destiné au tréfilage et/ou laminage à froid - Dimensions et tolérances

[SIST EN 10017:2004](https://standards.iteh.ai/catalog/standards/sist/e8cch177-9fae-4d44-9e39-9a696758d518/sist-en-10017-2004)

**Ta slovenski standard je istoveten z: EN 10017:2004**

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**ICS:**

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

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EUROPEAN STANDARD

EN 10017

NORME EUROPÉENNE

EUROPÄISCHE NORM

October 2004

ICS 77.140.65

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English version

## Steel rod for drawing and/or cold rolling - Dimensions and tolerances

Fil machine en acier non allié destiné au tréfilage et/ou laminage à froid - Dimensions et tolérances

Walzdraht aus Stahl zum Ziehen und/oder Kaltwalzen - Maße und Grenzabmaße

This European Standard was approved by CEN on 9 July 2004.

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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

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## Foreword

This document (EN 10017:2004) 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 supersedes EURONORM 17 (1970).

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, 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.

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**EN 10017:2004 (E)****1 Scope**

This document specifies the dimensions, the tolerances, the nominal cross-section and the nominal mass of steel rod for drawing.

This document concerns round, square, rectangular and hexagonal rod in steel grades specified in European Standards.

**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.

The requirements of this document rule when they differ from those in the standards and documents referred to below.

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

EN 10079:1992, *Definition of steel products*

**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 Information to be supplied by the purchaser**

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) section (round, square, rectangular, hexagonal)
- d) reference to this document
- e) nominal dimensions in millimetres
- f) information included in the quality product European Standard

**4.2 Examples**

Round rod with a diameter of 10 mm in steel C10D according EN 10016-2:

EXAMPLE 1 Round rod EN 10017 - 10 - EN 10016-2 - C10D

Rectangular rod with a width of 30 mm and thickness 5 mm in steel C3D1 according EN 10016-3:

EXAMPLE 2 Rectangular rod EN 10017 - 30 x 5 - EN 10016-3 - C3D1

Hexagonal rod with a wrench opening of 10 mm in steel C70D2 according EN 10016-4:

EXAMPLE 3 Hexagonal rod EN 10017 - 10 - EN 10016-4 - C70D2

## 5 Nominal sections and nominal mass

The values for sections and mass are shown in Tables 1 to 4 and are given as a guide.

They have been calculated and rounded off on the basis of nominal sizes and a density of 7,85 kg/dm<sup>3</sup>.

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

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## 6 Dimensions and tolerances

### 6.1 Round rod (Fig. 1)

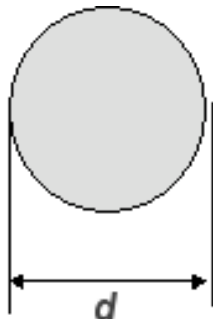


Figure 1 — Round rod

Table 1 — Dimensions, tolerances, nominal section and nominal mass

| Nominal diameter $d$<br>(mm) | Tolerance on diameter<br>(mm) | Tolerance on ovality <sup>a</sup><br>(mm)            | Nominal section<br>(mm <sup>2</sup> ) | Nominal mass<br>(kg/m) |
|------------------------------|-------------------------------|--|---------------------------------------|------------------------|
| 5                            | ± 0,3                         |  | 19,63                                 | 0,154                  |
| 5,5                          | ± 0,3                         |  | 23,76                                 | 0,187                  |
| 6                            | ± 0,3                         |  | 28,27                                 | 0,222                  |
| 6,5                          | ± 0,3                         |  | 33,18                                 | 0,26                   |
| 7                            | ± 0,3                         |  | 38,48                                 | 0,302                  |
| 7,5                          | ± 0,3                         |  | 44,18                                 | 0,347                  |
| 8                            | ± 0,3                         |  | 50,26                                 | 0,395                  |
| 8,5                          | ± 0,3                         |  | 56,74                                 | 0,445                  |
| 9                            | ± 0,3                         |  | 63,62                                 | 0,499                  |
| 9,5                          | ± 0,3                         |  | 70,88                                 | 0,556                  |
| 10                           | ± 0,4                         |  | 78,54                                 | 0,617                  |
| 10,5                         | ± 0,4                         |  | 86,59                                 | 0,68                   |
| 11                           | ± 0,4                         |  | 95,03                                 | 0,746                  |
| 11,5                         | ± 0,4                         |  | 103,9                                 | 0,816                  |
| 12                           | ± 0,4                         |  | 113,1                                 | 0,888                  |
| 12,5                         | ± 0,4                         |  | 122,7                                 | 0,963                  |
| 13                           | ± 0,4                         |  | 132,7                                 | 1,04                   |
| 13,5                         | ± 0,4                         |  | 143,1                                 | 1,12                   |
| 14                           | ± 0,4                         |  | 153,9                                 | 1,21                   |
| 14,5                         | ± 0,4                         |  | 165,1                                 | 1,3                    |
| 15                           | ± 0,4                         |  | 176,7                                 | 1,39                   |
| 15,5                         | ± 0,4                         |  | 188,7                                 | 1,48                   |
| 16                           | ± 0,5                         |  | 201,1                                 | 1,58                   |
| 16,5                         | ± 0,5                         |  | 213,8                                 | 1,68                   |
| 17                           | ± 0,5                         |  | 227,0                                 | 1,78                   |
| 17,5                         | ± 0,5                         |  | 240,5                                 | 1,89                   |
| 18                           | ± 0,5                         |  | 254,5                                 | 2,00                   |
| 18,5                         | ± 0,5                         |  | 268,8                                 | 2,11                   |
| 19                           | ± 0,5                         |  | 283,5                                 | 2,23                   |
| 19,5                         | ± 0,5                         |  | 298,6                                 | 2,34                   |
|                              |                               | 80 %<br>of the<br>total tolerance<br>on the diameter |                                       |                        |

(Continued)



Table 1 — Dimensions, tolerances, nominal section and nominal mass

(concluded)

| Nominal diameter<br><i>d</i><br>(mm) | Tolerance on<br>diameter<br>(mm) | Tolerance on<br>ovality <sup>a</sup><br>(mm)         | Nominal<br>section<br>(mm <sup>2</sup> ) | Nominal mass<br>(kg/m) |
|--------------------------------------|----------------------------------|--|--|------------------------|
| 20                                   | ± 0,5                            |  | 314,2                                    | 2,47                   |
| 21                                   | ± 0,5                            |  | 346,3                                    | 2,72                   |
| 22                                   | ± 0,5                            |  | 380,1                                    | 2,98                   |
| 23                                   | ± 0,5                            |  | 415,5                                    | 3,26                   |
| 24                                   | ± 0,5                            |  | 452,4                                    | 3,55                   |
| 25                                   | ± 0,5                            |  | 490,9                                    | 3,85                   |
| 26                                   | ± 0,6                            |  | 530,9                                    | 4,17                   |
| 27                                   | ± 0,6                            |  | 572,6                                    | 4,49                   |
| 28                                   | ± 0,6                            |  | 615,7                                    | 4,83                   |
| 29                                   | ± 0,6                            |  | 660,5                                    | 5,18                   |
| 30                                   | ± 0,6                            |  | 706,9                                    | 5,55                   |
| 31                                   | ± 0,6                            |  | 754,4                                    | 5,93                   |
| 32                                   | ± 0,6                            |  | 803,8                                    | 6,31                   |
| 33                                   | ± 0,6                            |  | 854,9                                    | 6,71                   |
| 34                                   | ± 0,6                            | 80 %<br>of the<br>total tolerance<br>on the diameter | 907,5                                    | 7,13                   |
| 35                                   | ± 0,6                            |  | 961,6                                    | 7,55                   |
| 36                                   | ± 0,6                            |  | 1017,4                                   | 7,99                   |
| 37                                   | ± 0,6                            |  | 1074,7                                   | 8,44                   |
| 38                                   | ± 0,6                            |  | 1133,5                                   | 8,90                   |
| 39                                   | ± 0,6                            |  | 1194                                     | 9,38                   |
| 40                                   | ± 0,8                            |  | 1256                                     | 9,87                   |
| 41                                   | ± 0,8                            |  | 1319,6                                   | 10,36                  |
| 42                                   | ± 0,8                            |  | 1384,7                                   | 10,88                  |
| 43                                   | ± 0,8                            |  | 1451,5                                   | 11,40                  |
| 44                                   | ± 0,8                            |  | 1519,7                                   | 11,93                  |
| 45                                   | ± 0,8                            |  | 1589,6                                   | 12,49                  |
| 46                                   | ± 0,8                            |  | 1661,1                                   | 13,05                  |
| 47                                   | ± 0,8                            |  | 1734,1                                   | 13,62                  |
| 48                                   | ± 0,8                            |  | 1808,7                                   | 14,20                  |
| 49                                   | ± 0,8                            |  | 1884,8                                   | 14,80                  |
| 50                                   | ± 0,8                            |  | 1962,5                                   | 15,41                  |

<sup>a</sup> Difference between the maximum and minimum diameter on the same cross section