



BSI Standards Publication

## Steel rod, bars and wire for cold heading and cold extrusion

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Part 4: Technical delivery conditions for steels for quenching and tempering

## National foreword

This British Standard is the UK implementation of EN 10263-4:2017. It supersedes BS EN 10263-4:2001, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee ISE/106, Wire Rod and Wire.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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EUROPEAN STANDARD

**EN 10263-4**

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English Version

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

Barres, fil machine et fils en acier pour transformation à froid et extrusion à froid - Partie 4: Conditions techniques de livraison des aciers pour trempe et revenu

Walzdraht, Stäbe und Draht aus Kaltstauch- und Kaltfließpressstählen - Teil 4: Technische Lieferbedingungen für Vergütungsstähle

This European Standard was approved by CEN on 26 July 2017.

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**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

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## European foreword

This document (EN 10263-4:2017) has been prepared by Technical Committee ECISS/TC 106 “Wire rod and wires”, the secretariat of which is held by AFNOR.

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of an identical text or by endorsement, at the latest by May 2018, and conflicting national standards shall be withdrawn at the latest by May 2018.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 10263-4:2001.

This European Standard EN 10263 is subdivided as follows:

- *Part 1: General technical delivery conditions*
- *Part 2: Technical delivery conditions for steels not intended for heat treatment after cold working*
- *Part 3: Technical delivery conditions for case hardening steels*
- *Part 4: Technical delivery conditions for steels for quenching and tempering*
- *Part 5: Technical delivery conditions for stainless steels*

According to the CEN-CENELEC Internal Regulations, the national standards organisations 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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

## 1 Scope

**1.1** This part of EN 10263 is applicable to round rod and round bars and wire with a diameter up to and including 100 mm, of non-alloy and alloy steel, intended for cold heading, cold extrusion, subsequent quenching and tempering or induction hardening or flame hardening.

**1.2** EN 10263-1:2017 is indispensable for this part of EN 10263.

## 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 10020, *Definition and classification of grades of steel*

EN 10263-1:2017, *Steel rod, bars and wire for cold heading and cold extrusion — Part 1: General technical delivery conditions*

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 10263-1:2017 and the following apply.

### 3.1

#### **quenched and tempered steels**

engineering steels which, because of their chemical composition, are suitable for hardening and in the quenched and tempered condition to provide enhanced toughness at a given tensile strength

## 4 Classification and designation

### 4.1 Classification

All steels covered by this part of EN 10263 are special steels according to EN 10020.

Steel grades from C35EC to C45RC as quoted in Table 3 are non-alloy steels and all others are alloy steels according to EN 10020.

### 4.2 Designation

See EN 10263-1:2017.

## 5 Production Process

### 5.1 Steelmaking process

See EN 10263-1:2017.

### 5.2 Deoxidation

All steels according to this part of EN 10263 shall be deoxidised.

## 6 Requirements

### 6.1 Delivery conditions

The delivery conditions in which the products covered by this part of EN 10263 are normally supplied, the product forms and the applicable requirements are given in Tables 1 and 2.