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



EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 10263-4:2017 sisaldab Euroopa standardi EN 10263-4:2017 ingliskeelset teksti.	This Estonian standard EVS-EN 10263-4:2017 consists of the English text of the European standard EN 10263-4:2017.		
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.		
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 22.11.2017.	Date of Availability of the European standard is 22.11.2017.		
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.		

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile <u>standardiosakond@evs.ee</u>.

ICS 77.140.60, 77.140.65

Standardite reprodutseerimise ja levitamise õigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonsesse süsteemi või edastamine ükskõik millises vormis või millisel teel ilma Eesti Standardikeskuse kirjaliku loata on keelatud.

Kui Teil on küsimusi standardite autorikaitse kohta, võtke palun ühendust Eesti Standardikeskusega: Koduleht www.evs.ee; telefon 605 5050; e-post info@evs.ee

The right to reproduce and distribute standards belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without a written permission from the Estonian Centre for Standardisation.

If you have any questions about copyright, please contact Estonian Centre for Standardisation:

Homepage www.evs.ee; phone +372 605 5050; e-mail info@evs.ee

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

November 2017

EN 10263-4

ICS 77.140.60; 77.140.65

Supersedes EN 10263-4:2001

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.

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.

CEN members are the national standards bodies of 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 United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

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

COII	itents	Page
Euro	pean foreword	3
1	Scope	4
2	Normative references	4
3	Terms and definitions	4
4 4.1 4.2	Classification and designation Classification Designation	4
5 5.1 5.2	Production Process Steelmaking process Deoxidation	4 4
6 6.1 6.2 6.3 6.4 6.5	Requirements Delivery conditions Chemical composition Mechanical properties Hardenability Surface requirements	5 5 5
6.6	Supplementary or special requirements	5 5
	Surface requirements	
2		

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.