Bright steel products - Technical delivery conditions - Part 2: Steels for general engineering purposes

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NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 10277-2:2008 sisaldab Euroopa standardi EN 10277-2:2008 ingliskeelset teksti.	This Estonian standard EVS-EN 10277-2:2008 consists of the English text of the European standard EN 10277-2:2008.
Standard on kinnitatud Eesti Standardikeskuse 26.05.2008 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.	This standard is ratified with the order of Estonian Centre for Standardisation dated 26.05.2008 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.
Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 12.03.2008.	Date of Availability of the European standard text 12.03.2008.
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English Version

Bright steel products - Technical delivery conditions - Part 2: Steels for general engineering purposes

Produits en acier transformés à froid - Conditions techniques de livraison - Partie 2: Aciers d'usage général

Blankstahlerzeugnisse - Technische Lieferbedingungen - Teil 2: Stähle für allgemeine technische Verwendung

This European Standard was approved by CEN on 4 February 2008.

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Foreword

This document (EN 10277-2:2008) has been prepared by Technical Committee ECISS/TC 23 “Steels for heat treatment, alloy steels and free-cutting steels - Qualities and dimensions”, 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of an identical text or by endorsement, at the latest by September 2008, and conflicting national standards shall be withdrawn at the latest by September 2008.

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 10277-2:1999.

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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

This European Standard EN 10277 'Bright steel products - Technical delivery conditions' is subdivided as follows:

Part 1: General;

Part 2: Steels for general engineering purposes;

Part 3: Free-cutting steels;

Part 4: Case hardening steels;

Part 5: Steels for quenching and tempering.

During the preparation of the first edition of this European Standard there were not enough statistical data available concerning mechanical properties of bright bar products. Since then it has been recognized that the proof strength values in the cold drawn condition were too high. In addition, cyclic stresses that occur during straightening can reduce the proof strength (Bauschinger's effect), which was not taken into account when drafting the first edition of this standard. In this second edition the proof strength values of non-alloy and alloy grades in condition +QT+C in parts 3 and 5 have been adjusted downwards compared to the first edition.

Furthermore for this part the values for the tensile strength of grades S235JRC and S355J2C were adapted to EN 10025-2 in the table for mechanical properties.

1 Scope

This part of EN 10277 applies to bright steel bars for general engineering purposes in the drawn, turned or ground condition and in straight lengths.

This EN 10277-2 is complemented by EN 10277-1.

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 10025-2, *Hot rolled products of structural steels – Part 2: Technical delivery conditions for non-alloy structural steels*

EN 10083-2, *Steels for quenching and tempering - Part 2: Technical delivery conditions for non alloy steels*

EN 10277-1, *Bright steel products - Technical delivery conditions - Part 1: General*

3 Terms and definitions

For the purposes of this European Standard, the terms and definitions given in EN 10277-1 apply.

4 Classification and designation

4.1 Classification

All steels specified in this European Standard are classified as non-alloy quality steels.

4.2 Designation

See EN 10277-1.

NOTE This Standard does not comprise impact requirements.

5 Information to be supplied by the purchaser

See EN 10277-1.

6 Manufacturing process

See EN 10277-1.