

Výrobky valcované za tepla z konštrukčných ocelí Časť 3: Technické dodacie podmienky na normalizačne žíhané/normalizačne valcované zvariteľné jemnozrnné konštrukčné ocele

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Hot rolled products of structural steels - Part 3: Technical delivery conditions for normalized/normalized rolled weldable fine grain structural steels

Táto norma obsahuje anglickú verziu európskej normy. This standard includes the English version of the European Standard.

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English Version

Hot rolled products of structural steels - Part 3: Technical delivery conditions for normalized/normalized rolled weldable fine grain structural steels

Produits laminés à chaud en aciers de construction -Partie 3 : Conditions techniques de livraison pour les aciers de construction soudable à l'état normalisé/laminage normalisant Warmgewalzte Erzeugnisse aus Baustählen - Teil 3: Technische Lieferbedingungen für normalgeglühte/normalisierend gewalzte schweißgeeignete Feinkornbaustähle

This European Standard was approved by CEN on 16 June 2019.

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

This document (EN 10025-3:2019) has been prepared by Technical Committee CEN/TC 459/SC 3 "Structural steels other than reinforcements", 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of an identical text or by endorsement, at the latest by February 2020 and conflicting national standards shall be withdrawn at the latest by February 2020.

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 10025-3:2004

This document consists of the following parts, under the general title *Hot rolled products of structural steels:*

- Part 1: General technical delivery conditions
- Part 2: Technical delivery conditions for non-alloy structural steels
- Part 3: Technical delivery conditions for normalized/normalized rolled weldable fine grain structural steels
- Part 4: Technical delivery conditions for thermomechanical rolled weldable fine grain structural steels
- Part 5: Technical delivery conditions for structural steels with improved atmospheric corrosion resistance
- Part 6: Technical delivery conditions for flat products of high yield strength structural steels in the quenched and tempered condition

For a short transition period there will be a coexistence of EN 10025-1:2004 with EN 10025-2:2018 to -6:2018, since the new EN 10025-1 has to fulfil the requirements of the CPR and will therefore be published later. For this short transition period up-to-the publication of the next edition of part 1 the following are to be taken into account for EN 10025-1:2004:

- a) all dated and undated references to EN 10025-1:2004 to -6:2004 are unchanged to this version with following exception: In 9.2.2.1 the references are 8.3.1 and 8.3.2 instead of 8.4.1 and 8.4.2,
- b) Clauses 5, 12 and 13 of EN 10025-1:2004 are no longer relevant.

The main changes with respect to the previous edition are listed below:

- a) part 3 is now a stand-alone standard for technical delivery conditions including the preparation of samples and test pieces, the test methods, the marking, labelling and packaging and the drawings;
- b) for applications under the CPR this document and part 1 are used together;
- c) requirements for elements not definded were added to 7.2.1 and 7.2.2;
- d) Option 33 was added, Option 3 was renumbered to Option 24 and Option 9 was deleted;
- e) Si-content in 7.2.4 was changed;
- f) 7.4.3 concerning hot-dip zinc coating was modified;

- g) key to Figure A.1 was updated;
- h) Annex B concerning the corresponding EURONORMS was deleted;
- i) references were updated and the document was editorially revised.

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, Republic of North 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

This document specifies technical delivery conditions for flat and long products of hot rolled weldable fine grain structural steels in the normalized/normalized rolled delivery condition in the grades and qualities given in Tables 1 to 3 (chemical composition) and Tables 4 to 6 (mechanical properties) in thickness ≤ 250 mm.

The steels specified in this document are especially intended for use in heavily loaded parts of welded structures such as, bridges, flood gates, storages tanks, water supply tanks, etc., for service at ambient and low temperatures.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 1011-2, Welding — Recommendations for welding of metallic materials — Part 2: Arc welding of ferritic steels

EN 10017, Steel rod for drawing and/or cold rolling — Dimensions and tolerances

EN 10020:2000, Definition and classification of grades of steel

EN 10021, General technical delivery conditions for steel products

EN 10024, Hot rolled taper flange I sections — Tolerances on shape and dimensions

EN 10025-1, Hot rolled products of structural steels — Part 1: General technical delivery conditions

EN 10027-1, Designation systems for steels — Part 1: Steel names

EN 10027-2, Designation systems for steels — Part 2: Numerical system

EN 10029, Hot-rolled steel plates 3 mm thick or above — Tolerances on dimensions and shape

EN 10034, Structural steel I and H sections — Tolerances on shape and dimensions

EN 10048, Hot rolled narrow steel strip — Tolerances on dimensions and shape

EN 10051, Continuously hot-rolled strip and plate/sheet cut from wide strip of non-alloy and alloy steels — Tolerances on dimensions and shape

EN 10055, Hot rolled steel equal flange tees with radiused root and toes — Dimensions and tolerances on shape and dimensions

EN 10056-1, Structural steel equal and unequal leg angles — Part 1: Dimensions

EN 10056-2, Structural steel equal and unequal leg angles — Part 2: Tolerances on shape and dimensions

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m EN~10058}$, Hot rolled flat steel bars and steel wide flats for general purposes — Dimensions and tolerances on shape and dimensions

EN 10059, Hot rolled square steel bars for general purposes — Dimensions and tolerances on shape and dimensions

EN 10060, Hot rolled round steel bars for general purposes — Dimensions and tolerances on shape and dimensions

EN 10061, Hot rolled hexagon steel bars for general purposes — Dimensions and tolerances on shape and dimensions

EN 10067, Hot rolled bulb flats — Dimensions and tolerances on shape, dimensions and mass

EN 10079, Definition of steel products

EN 10160, Ultrasonic testing of steel flat product of thickness equal or greater than 6 mm (reflection method)

EN 10163-1, Delivery requirements for surface condition of hot-rolled steel plates, wide flats and sections — Part 1: General requirements

EN 10163-2, Delivery requirements for surface condition of hot-rolled steel plates, wide flats and sections — Part 2: Plate and wide flats

EN 10163-3, Delivery requirements for surface condition of hot-rolled steel plates, wide flats and sections — Part 3: Sections

EN 10164, Steel products with improved deformation properties perpendicular to the surface of the product — Technical delivery conditions

EN 10168, Steel products — Inspection documents — List of information and description

EN 10204, Metallic products — Types of inspection documents

EN 10279, Hot rolled steel channels — Tolerances on shape, dimensions and mass

EN 10306, Iron and steel — Ultrasonic testing of H beams with parallel flanges and IPE beams

EN 10308, Non destructive testing — Ultrasonic testing of steel bars

EN 10315, Routine method for analysis of high alloy steel by X-ray Fluorescence Spectrometry (XRF) by using a near by technique

CR 10320, Optical emission analysis of low alloy steels (routine method) — Method for determination of C, Si, S, P, Mn, Cr, Ni and Cu

CEN/TR 10347, Guidance for forming of structural steels in processing

EN 10363, Continuously hot-rolled patterned steel strip and plate/sheet cut from wide strip — Tolerances on dimensions and shape

EN 10365, Hot rolled steel channels, I and H sections — Dimensions and masses

EN ISO 148-1, Metallic materials — Charpy pendulum impact test — Part 1: Test method (ISO 148-1)

EN ISO 377, Steel and steel products — Location and preparation of samples and test pieces for mechanical testing (ISO 377)

EN ISO 2566-1, Steel — Conversion of elongation values — Part 1: Carbon and low alloy steels (ISO 2566-1)

EN ISO 6892-1:2016, Metallic materials — Tensile testing — Part 1: Method of test at room temperature (ISO 6892-1:2016)

EN ISO 9443, Surface quality classes for hot-rolled bars and wire rod (ISO 9443)

EN ISO 14284, Steel and iron — Sampling and preparation of samples for the determination of chemical composition (ISO 14284)

EN ISO 14713-2:2009, Zinc coatings — Guidelines and recommendations for the protection against corrosion of iron and steel in structures — Part 2: Hot dip galvanizing (ISO 14713-2:2009)

EN ISO 15350, Steel and iron — Determination of total carbon and sulfur content — Infrared absorption method after combustion in an induction furnace (routine method) (ISO 15350)

koniec náhľadu – text ďalej pokračuje v platenej verzii STN