SLOVENSKI STANDARD
SIST EN 1090-2:2018

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Izvedba jeklenih in aluminijastih konstrukcij - 2. del: Tehnične zahteve za izvedbo jeklenih konstrukcij

Execution of steel structures and aluminium structures - Part 2: Technical requirements for steel structures

Ausführung von Stahltragwerken und Aluminiumtragwerken - Teil 2: Technische Regeln für die Ausführung von Stahltragwerken

Exécution des structures en acier et des structures en aluminium - Partie 2: Exigences techniques pour les structures en acier

Ta slovenski standard je istoveten z: **EN 1090-2:2018**

ICS:

91.080.13	Jeklene konstrukcije	Steel structures

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EUROPEAN STANDARD

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English Version

Execution of steel structures and aluminium structures - Part 2: Technical requirements for steel structures

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Ausführung von Stahltragwerken und Aluminiumtragwerken - Teil 2: Technische Regeln für die Ausführung von Stahltragwerken

This European Standard was approved by CEN on 22 January 2018.

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.

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

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European foreword

This document (EN 1090-2:2018) has been prepared by Technical Committee CEN/TC 135 “Execution of steel structures and aluminium structures”, the secretariat of which is held by SN.

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of an identical text or by endorsement, at the latest by December 2018 and conflicting national standards shall be withdrawn at the latest by December 2018.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 1090-2:2008+A1:2011.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

This document is part of the EN 1090 series, which comprises the following parts:

— EN 1090-1, *Execution of steel structures and aluminium structures - Part 1: Assessment and verification of constancy of performance for structural components*

— EN 1090-2, *Execution of steel structures and aluminium structures - Part 2: Technical requirements for steel structures*

— EN 1090-3, *Execution of steel structures and aluminium structures - Part 3: Technical requirements for aluminium structures*

— EN 1090-4, *Execution of steel structures and aluminium structures - Part 4: Technical requirements for cold-formed structural steel elements and cold-formed structures for roof, ceiling, floor and wall applications*

— EN 1090-5, *Execution of steel structures and aluminium structures - Part 5: Technical requirements for cold-formed structural aluminium elements and cold-formed structures for roof, ceiling, floor and wall applications*

Technical requirements for cold-formed structural steel elements, members and sheeting and cold-formed steel structures for roof, ceiling, floor, wall, and cladding applications have been removed from this Part of the EN 1090 series, as they are given in EN 1090-4.

Informative Annex B giving guidance for the determination of execution class has been removed as normative requirements for the selection of execution class are now included in of EN 1993-1-1:2005/A1:2014, Annex C.

A new informative Annex D has been included giving guidance on a procedure for checking the capability of thermal cutting processes.

A new informative Annex I has been included giving guidance on determination of the loss of preload from thick coatings on contact surfaces in preloaded connections.

Normative Annex J “Use of compressible washer-type direct tension indicators” has been removed.

A new informative Annex L has been included giving guidance on the selection of weld inspection classes.

Other annexes have been renumbered accordingly:

— Annex D becomes Annex B;

— Annex K becomes Annex J;

— Annex L becomes Annex K.

Annexes A, C, E, F, G, H and M have not been renumbered.

There have been some amendments included in these annexes.

The main text contains some changes. It includes updated cross-references to supporting standards and some corrections.

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, 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.

Introduction

This European Standard specifies requirements for execution of steel structures, in order to ensure adequate levels of mechanical resistance and stability, serviceability and durability.

This European Standard specifies requirements for execution of steel structures in particular those that are designed according to the EN 1993 series and the steel parts of composite steel and concrete structures designed according to the EN 1994 series.

This European Standard presupposes that the work is carried out with the necessary skill and adequate equipment and resources to perform the work in accordance with the execution specification and the requirements of this European Standard.

1 Scope

This European Standard specifies requirements for execution of structural steelwork as structures or as manufactured components, produced from:

— hot rolled, structural steel products up to and including grade S700;

— cold formed components and sheeting up to and including grade S700 (unless coming within the scope of EN 1090-4);

— hot finished or cold formed austenitic, austenitic-ferritic and ferritic stainless steel products;

— hot finished or cold formed structural hollow sections, including standard range and custom-made rolled products and hollow sections manufactured by welding.

For components produced from cold formed components, and cold formed structural hollow sections that are within the scope of EN 1090-4, the requirements of EN 1090-4 take precedence over corresponding requirements in this European Standard.

This European Standard can also be used for structural steel grades up to and including S960, provided that conditions for execution are verified against reliability criteria and any necessary additional requirements are specified.

This European Standard specifies requirements, which are mostly independent of the type and shape of the steel structure (e.g. buildings, bridges, plated or latticed components) including structures subjected to fatigue or seismic actions. Certain requirements are differentiated in terms of execution classes.

This European Standard applies to structures designed according to the relevant part of the EN 1993 series. Sheet piling, displacement piles and micropiles designed to EN 1993-5 are intended to be executed in accordance with respectively EN 12063, EN 12699 and EN 14199. This European Standard only applies to the execution of waling, bracing, and connections.

This European Standard applies to steel components in composite steel and concrete structures designed according to the relevant part of the EN 1994 series.

This European Standard can be used for structures designed according to other design rules provided that conditions for execution comply with them and any necessary additional requirements are specified.

This European Standard includes the requirements for the welding of reinforcing steels to structural steels. This European Standard does not include requirements for the use of reinforcing steels for reinforced concrete applications.

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.

2.1 Constituent products

2.1.1 Steels

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

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

EN 10025-3, *Hot rolled products of structural steels - Part 3: Technical delivery conditions for normalized/normalized rolled weldable fine grain structural steels*

EN 10025-4, *Hot rolled products of structural steels - Part 4: Technical delivery conditions for thermomechanical rolled weldable fine grain structural steels*

EN 10025-5, *Hot rolled products of structural steels - Part 5: Technical delivery conditions for structural steels with improved atmospheric corrosion resistance*

EN 10025-6, *Hot rolled products of structural steels — Part 6: Technical delivery conditions for flat products of high yield strength structural steels in the quenched and tempered condition*

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*

EN 10058, *Hot rolled flat steel bars 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 10080, *Steel for the reinforcement of concrete - Weldable reinforcing steel - General*

EN 10088-1, *Stainless steels - Part 1: List of stainless steels*

EN 10088-4:2009, *Stainless steels - Part 4: Technical delivery conditions for sheet/plate and strip of corrosion resisting steels for construction purposes*

EN 10088-5:2009, *Stainless steels - Part 5: Technical delivery conditions for bars, rods, wire, sections and bright products of corrosion resisting steels for construction purposes*