

Literaturhinweise

Verweisungen in Empfehlungen (d. h. in Abschnitten mit „sollten“)

Die folgenden Dokumente werden im Text in solcher Weise in Bezug genommen, dass einige Teile davon oder ihr gesamter Inhalt Anforderungen des vorliegenden Dokuments darstellen. In Abhängigkeit von nationalen Regeln und/oder relevanten Vertragsbestimmungen könnten alternative Lösungen verwendet/angenommen werden, wenn sie technisch verifiziert sind. Bei datierten Verweisungen gilt nur die in Bezug genommene Ausgabe. Bei undatierten Verweisungen gilt die letzte Ausgabe des in Bezug genommenen Dokuments (einschließlich aller Änderungen).

EN 1992-1-1, *Eurocode 2: Bemessung und Konstruktion von Stahlbeton- und Spannbetontragwerken — Teil 1-1: Allgemeine Bemessungsregeln und Regeln für den Hochbau*

EN 1992-4, *Eurocode 2 — Bemessung und Konstruktion von Stahlbeton- und Spannbetontragwerken — Teil 4: Bemessung der Verankerung von Befestigungen in Beton*

EN 1993-1-5:2006, *Eurocode 3 — Bemessung und Konstruktion von Stahlbauten — Teil 1-5: Plattenförmige Bauteile*

EN 10025 (alle Teile), *Warmgewalzte Erzeugnisse aus Baustählen*

EN 10080, *Stahl für die Bewehrung von Beton — Schweißgeeigneter Betonstahl — Allgemeines*

EN 14399 (alle Teile), *Hochfeste vorspannbare Garnituren für Schraubverbindungen im Metallbau*

EN 15048 (alle Teile), *Garnituren für nicht vorgespannte Schraubverbindungen im Metallbau*

Weitere Verweisungen

Die folgenden Dokumente fallen nicht in die vorstehend angegebenen Kategorien, werden jedoch informativ im Dokument zitiert, beispielsweise in Anmerkungen.

EN 1090-1, *Ausführung von Stahltragwerken und Aluminiumtragwerken — Teil 1: Bewertung und Überprüfung der Leistungsbeständigkeit für tragende Bauteile aus Stahl und Aluminium*

EN 1991-1-7, *Eurocode 1: Einwirkungen auf Tragwerke — Teil 1-7: Allgemeine Einwirkungen — Außergewöhnliche Einwirkungen*

EN 1993-1-14, *Eurocode 3: Bemessung und Konstruktion von Stahlbauten — Teil 1-14: Bemessung unterstützt durch Finite-Elemente-Analyse*

EN 10210-1, *Warmgefertigte Hohlprofile für den Stahlbau aus unlegierten Baustählen und aus Feinkornbaustählen — Teil 1: Technische Lieferbedingungen*

EN 10219-1, *Kaltgefertigte geschweißte Hohlprofile für den Stahlbau aus unlegierten Baustählen und aus Feinkornbaustählen — Teil 1: Technische Lieferbedingungen*

EN 10149-2, *Warmgewalzte Flacherzeugnisse aus Stählen mit hoher Streckgrenze zum Kaltumformen — Teil 2: Technische Lieferbedingungen für thermomechanisch gewalzte Stähle*

FprCEN/TR 17081, *Bemessung der Verankerung von Befestigungen in Beton — Traglastverfahren für Befestigungsmittel von Kopfbolzen und Dübel*

CEN/TR 1993-1-103, *Eurocode 3 — Design of steel structures — Part 1-103: Elastic critical buckling of members*

EN 1993-1-10, *Eurocode 3: Bemessung und Konstruktion von Stahlbauten — Teil 1-10: Stahlsortenauswahl im Hinblick auf Bruchzähigkeit und Eigenschaften in Dickenrichtung*

EN 1994-1-1, *Eurocode 4: Bemessung und Konstruktion von Verbundtragwerken aus Stahl und Beton — Teil 1-1: Allgemeine Bemessungsregeln und Anwendungsregeln für den Hochbau*

EN ISO 2560, *Schweißzusätze — Umhüllte Stabelektroden zum Lichtbogenhandschweißen von unlegierten Stählen und Feinkornstählen — Einteilung*

EN ISO 5817, *Schweißen — Schmelzschweißverbindungen an Stahl, Nickel, Titan und deren Legierungen (ohne Strahlschweißen) — Bewertungsgruppen von Unregelmäßigkeiten*

EN ISO 13918, *Schweißen — Bolzen und Keramikringe für das Lichtbogenbolzenschweißen*

EN ISO 14341, *Schweißzusätze — Drahtelektroden und Schweißgut zum Metall-Schutzgasschweißen von unlegierten Stählen und Feinkornstählen — Einteilung*

EN ISO 14555, *Schweißen — Lichtbogenbolzenschweißen von metallischen Werkstoffen*

EN ISO 16834, *Schweißzusätze — Drahtelektroden, Drähte, Stäbe und Schweißgut zum Schutzgasschweißen von hochfesten Stählen — Einteilung*

EN ISO 17632, *Schweißzusätze — Fülldrahtelektroden zum Metall-Lichtbogenschweißen mit und ohne Schutzgas von unlegierten Stählen und Feinkornstählen — Einteilung*

EN ISO 17659, *Schweißen — Mehrsprachige Benennungen für Schweißverbindungen mit bildlichen Darstellungen*

EN ISO 18276, *Schweißzusätze — Fülldrahtelektroden zum Metall-Lichtbogenschweißen mit und ohne Schutzgas von hochfesten Stählen — Einteilung*

ISO 1891, *Fasteners — Terminology*

English Version

Eurocode 3: Design of steel structures - Part 1-8: Design of joints

Eurocode 3: Calcul des structures en acier - Partie 1-8 :
Calcul des assemblages

Eurocode 3: Bemessung und Konstruktion von
Stahlbauten - Teil 1-8: Bemessung von Anschlüssen

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 250.

If this draft becomes a European Standard, 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.

This draft European Standard was established by CEN 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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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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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 (prEN 1993-1-8:2021) has been prepared by Technical Committee CEN/TC 250 “Structural Eurocodes”, the secretariat of which is held by BSI. CEN/TC 250 is responsible for all Structural Eurocodes and has been assigned responsibility for structural and geotechnical design matters by CEN.

This document is currently submitted to the CEN Enquiry.

This document will supersede EN 1993-1-8:2005.

The first generation of EN Eurocodes was published between 2002 and 2007. This document forms part of the second generation of the Eurocodes, which have been prepared under Mandate M/515 issued to CEN by the European Commission and the European Free Trade Association.

The Eurocodes have been drafted to be used in conjunction with relevant execution, material, product and test standards, and to identify requirements for execution, materials, products and testing that are relied upon by the Eurocodes.

The Eurocodes recognize the responsibility of each Member State and have safeguarded their right to determine values related to regulatory safety matters at national level through the use of National Annexes.

Introduction

0.1 Introduction to the Eurocodes

The Structural Eurocodes comprise the following standards generally consisting of a number of Parts:

- EN 1990 Eurocode: Basis of structural and geotechnical design
- EN 1991 Eurocode 1: Actions on structures
- EN 1992 Eurocode 2: Design of concrete structures
- EN 1993 Eurocode 3: Design of steel structures
- EN 1994 Eurocode 4: Design of composite steel and concrete structures
- EN 1995 Eurocode 5: Design of timber structures
- EN 1996 Eurocode 6: Design of masonry structures
- EN 1997 Eurocode 7: Geotechnical design
- EN 1998 Eurocode 8: Design of structures for earthquake resistance
- EN 1999 Eurocode 9: Design of aluminium structures
- New parts are under development, e.g. Eurocode for design of structural glass

0.2 Introduction to EN 1993

EN 1993 (all parts) applies to the design of buildings and civil engineering works in steel. It complies with the principles and requirements for the safety and serviceability of structures, the basis of their design and verification that are given in EN 1990 – Basis of structural design.

EN 1993 (all parts) is concerned only with requirements for resistance, serviceability, durability and fire resistance of steel structures. Other requirements, e.g. concerning thermal or sound insulation, are not covered.

EN 1993 is subdivided in various parts:

EN 1993-1, *Design of Steel Structures — Part 1: General rules and rules for buildings*;

EN 1993-2, *Design of Steel Structures — Part 2: Steel bridges*;

EN 1993-3, *Design of Steel Structures — Part 3: Towers, masts and chimneys*;

EN 1993-4, *Design of Steel Structures — Part 4: Silos and tanks*;

EN 1993-5, *Design of Steel Structures — Part 5: Piling*;

EN 1993-6, *Design of Steel Structures — Part 6: Crane supporting structures*;

EN 1993-7, *Design of steel structures — Part 7: Design of sandwich panels*.

EN 1993-1 in itself does not exist as a physical document, but comprises the following 14 separate parts, the basic part being EN 1993-1-1:

EN 1993-1-1, *Design of Steel Structures — Part 1-1: General rules and rules for buildings;*

EN 1993-1-2, *Design of Steel Structures — Part 1-2: Structural fire design;*

EN 1993-1-3, *Design of Steel Structures — Part 1-3: Cold-formed members and sheeting;*

NOTE Cold formed hollow sections supplied according to EN 10219 are covered in EN 1993-1-1.

EN 1993-1-4, *Design of Steel Structures — Part 1-4: Stainless steels;*

EN 1993-1-5, *Design of Steel Structures — Part 1-5: Plated structural elements;*

EN 1993-1-6, *Design of Steel Structures — Part 1-6: Strength and stability of shell structures;*

EN 1993-1-7, *Design of Steel Structures — Part 1-7: Strength and stability of planar plated structures transversely loaded;*

EN 1993-1-8, *Design of Steel Structures — Part 1-8: Design of joints;*

EN 1993-1-9, *Design of Steel Structures — Part 1-9: Fatigue strength of steel structures;*

EN 1993-1-10, *Design of Steel Structures — Part 1-10: Selection of steel for fracture toughness and through-thickness properties;*

EN 1993-1-11, *Design of Steel Structures — Part 1-11: Design of structures with tension components made of steel;*

EN 1993-1-12, *Design of Steel Structures — Part 1-12: Additional rules for steel grades up to S960;*

EN 1993-1-13, *Design of Steel Structures — Part 1-13: Beams with large web openings;*

EN 1993-1-14, *Design of Steel Structures — Part 1-14: Design assisted by finite element analysis.*

All subsequent parts EN 1993-1-2 to EN 1993-1-14 treat general topics that are independent from the structural type like structural fire design, cold-formed members and sheeting, stainless steels, plated structural elements, etc.

All subsequent parts numbered EN 1993-2 to EN 1993-7 treat topics relevant for a specific structural type like steel bridges, towers, masts and chimneys, silos and tanks, piling, crane supporting structures, etc. EN 1993-2 to EN 1993-7 refer to the generic rules in EN 1993-1 and supplement, modify or supersede them.

0.3 Introduction to EN 1993-1-8

EN 1993-1-8 gives guidance and recommendations for the design of joints and connections in steel structures. It has been assumed that the execution of its provisions follows the requirements given in EN 1090.

0.4 Verbal forms used in the Eurocodes

The verb “shall” expresses a requirement strictly to be followed and from which no deviation is permitted in order to comply with the Eurocodes.