

Structural steels with– improved atmospheric corrosion resistance. Technical delivery conditions

The European Standard EN 10155:1993 has the status of a
British Standard

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This British Standard, having been prepared under the direction of the Iron and Steel Standards Policy Committee, was published under the authority of the Standards Board and comes into effect on 15 September 1993

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National foreword

This British Standard has been prepared under the direction of the Iron and Steel Standards Policy Committee and is the English language version of EN 10155:1993 *Structural steels with improved atmospheric corrosion resistance. Technical delivery conditions*, published by the European Committee for Standardization (CEN).

Together with BS EN 10113-1, BS EN 10113-2 and BS EN 10113-3, it partially supersedes BS 4360:1990 which will be withdrawn in due course.

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, the EN title page, pages 2 to 22, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

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Descriptors: Iron- and steel products, hot rolled products, structural steels, corrosion resistant steels, atmospheric corrosion, grades: quality, chemical composition, dimensions, delivery conditions, tests, inspection, marking

English version

Structural steels with improved atmospheric corrosion resistance — Technical delivery conditions

Aciers de construction à résistance améliorée à la corrosion atmosphérique — Conditions techniques de livraison

Wetterfeste Baustähle — Technische Lieferbedingungen

This European Standard was approved by CEN on 1993-06-21. 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 Central Secretariat or to any CEN member.

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CEN

European Committee for Standardization
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Foreword

This European Standard has been drawn up by ECISS/TC 10 "Structural steel — qualities" whose secretariat is held by NNI.

This European Standard replaces Euronorm 155-80 *Weathering steels for structural purposes — Quality standard*.

ECISS/TC 10 met 26 and 27 September 1991 in Brussels and agreed on the text for circulation for formal vote within CEN. The following countries were represented in that meeting: Belgium, Denmark, Finland, France, Germany, Italy, Luxembourg, Netherlands, Sweden and United Kingdom.

This Standard was approved by CEN as a European Standard.

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 1993, and conflicting national standards shall be withdrawn at the latest by December 1993.

In accordance with the CEN/CENELEC Internal Regulations, the following countries are bound to implement this European Standard:

Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

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1 Scope

1.1 This European Standard specifies requirements for long products and flat products of hot-rolled steels with improved atmospheric corrosion resistance (alloyed special steel according to EN 10020) in the grades and qualities given in Table 3 (chemical composition), Table 5 and Table 6 (mechanical properties) in the usual delivery condition as given in **7.2**.

The thicknesses in which products of the steel grades and qualities specified in this European Standard may be supplied are given in Table 2. The application of this standard to greater thicknesses shall be agreed at the time of the enquiry and order.

Option 1.

The steels specified in this European Standard are intended for use in welded, bolted and riveted components which shall have enhanced resistance to atmospheric corrosion, for service at ambient temperatures (subject to the restrictions described in **7.5.1**).

They are not intended to be heat treated except products delivered in the delivery condition N. Stress relief annealing is permitted. Products delivered in the N condition may be normalized and hot formed after delivery (see clause **3**).

1.2 This European Standard does not apply to structural steels for use in the applications referred to in **1.1** for which specific Euronorms exist or European Standards dealing with steels for general structural applications are being prepared:

- non-alloy structural steels – (see EN 10025);
- steels for simple pressure vessels – (see EN 10207);
- non-alloy steel sheet and strip for pressure purposes – (see EN 10028-1 to EN 10028-3);
- reinforcing bars (not for prestressing) – (see prEN 10080)¹⁾;
- weldable fine grain structural steel – (see EN 10113-1 to EN 10113-3);
- hot finished structural hollow sections – (see EN 10210-1).

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

2.1 General standards

EN 10020, *Definition and classification of grades of steel*.

EN 10021, *General technical delivery requirements for steel and iron products*.

EN 10025, *Hot-rolled products of non-alloy structural steels — Technical delivery conditions*.

EN 10027-1, *Designation systems for steel — Part 1: Steel names, principal symbols*.

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

prEN 10052¹⁾, *Vocabulary of heat treatment terms for ferrous products*.

EN 10079, *Definition of steel products*.

EN 10163, *Delivery requirements for surface condition of hot-rolled steel plates, wide flats and sections — Part 1: General requirements — Part 2: Plate and wide flats — Part 3: Sections*.

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

EN 10204, *Metallic products — Types of inspection documents*.

EURONORM 168 (1986)²⁾, *Iron and steel products — Inspection documents — Contents*.

ECISS IC 10, *Designation systems for steel — Additional symbols for steel names*.

2.2 Standards on dimensions and tolerances

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

EN 10051, *Continuously hot-rolled uncoated plate, sheet and strip of non-alloy and alloy steels — Tolerances on dimensions and shape*.

prEN 10034¹⁾, *Structural steel I and H sections — Tolerances on shape and dimensions*.

¹⁾ Draft is under discussion.

²⁾ Until these Euronorms are transformed into European Standards, they can either be implemented or reference made to the corresponding national standards, the list of which is given in annex D to this European Standard.