INTERNATIONAL STANDARD

ISO 6930

Second edition 2019-07

High yield strength steel plates and wide flats for cold forming — Delivery conditions

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Reference number ISO 6930:2019(E)



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Published in Switzerland

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 17, *Steel*, Subcommittee SC 3, *Steels for structural purposes*.

This second edition cancels and replaces ISO 6930-1:2001 and ISO 6930-2:2004, which have been technically revised.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

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High yield strength steel plates and wide flats for cold forming — Delivery conditions

1 Scope

This document specifies the requirements for weldable high yield strength plates and wide flats for cold forming.

It does not apply to weldable structural steels, whether or not of special quality, which are covered by other International Standards, namely:

- structural steels: ISO 630 (all parts);
- high yield strength flat steel products: ISO 4950-1, ISO 4950-2 and ISO 4950-3;
- hot-rolled steel sheet of higher yield strength with improved formability: ISO 5951;
- sheet and strip: refer to ISO/TC 17, Steel, SC 12, Continuous mill flat rolled products;
- tubular products; refer to ISO/TC 5, Ferrous metal pipes and metallic fittings, SC 1, Steel tubes.

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.

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

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

ISO 404, Steel and steel products — General technical delivery requirements

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

ISO 4885, Ferrous materials — Heat treatments — Vocabulary

ISO 4948-1, Steels — Classification — Part 1: Classification of steels into unalloyed and alloy steels based on chemical composition

ISO 4948-2, Steels — Classification — Part 2: Classification of unalloyed and alloy steels according to main quality classes and main property or application characteristics

ISO/TS 4949, Steel names based on letter symbols

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

ISO 6929, Steel products — Vocabulary

ISO 7438, Metallic materials — Bend test

ISO 7452, Hot-rolled steel plates — Tolerances on dimensions and shape

ISO 7788, Steel — Surface finish of hot-rolled plates and wide flats — Delivery requirements

ISO 9034, Hot-rolled structural steel wide flats — Tolerances on dimensions and shape

ISO/TR 9769, Steel and iron — Review of available methods of analysis

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ISO 10474, Steel and steel products — Inspection documents

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

ISO 17577, Steel — Ultrasonic testing of steel flat products of thickness equal to or greater than 6 mm

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 6929 and ISO 4885 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at https://www.iso.org/obp
- IEC Electropedia: available at http://www.electropedia.org/

3.1

wide flat

flat product of width over 150 mm up to and including 1 250 mm and thickness generally over 4 mm, supplied in lengths, i.e. not coiled, and the edges are square, i.e. hot-rolled on all four sides (or in box passes)

4 Dimensions and tolerances

4.1 General

This document applies to plates and wide-flats, hot-rolled on reversing mills, of a thickness ≤ 20 mm for grades specified in Annexes A and B and of a thickness between 4 mm and 50 mm (inclusive) for grades specified in Annex C.

4.2 Mandatory information

The following information shall be supplied by the purchaser at the time of enquiry and order:

- a) the quantity required;
- b) the type of product;
- c) the nominal dimensions and tolerances on dimensions and shape of the product;
- d) the number of this document, i.e. ISO 6930;
- e) the steel name (grade);
- f) all required options;
- g) inspection document to be issued.

5 Classification and designation

5.1 Classification

The steel grades specified in this document shall be classified as non-alloy or alloy quality steels in accordance with ISO 4948-1, ISO 4948-2 and ISO/TS 4949 depending on the steel-grade chemical composition and heat treatment condition.