INTERNATIONAL STANDARD

ISO 630-3

First edition
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Structural steels —

Part 3: Technical delivery conditions for fine-grain structural steels

Aciers de construction —

Partie 3: Conditions techniques de livraison pour aciers de construction à grains fins

Reference number
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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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.

ISO 630-3 was prepared by Technical Committee ISO/TC 17, *Steel*, Subcommittee SC 3, *Steels for structural purposes*.

This first edition cancels and replaces ISO 630:1995, which has been technically revised. It incorpoates ISO 630:1995/Amd 1:2003.

ISO 630 consists of the following parts, under the general title *Structural steels*:

— *Part 1: General technical delivery conditions for hot-rolled products*

— *Part 2: Technical delivery conditions for structural steels for general purposes*

— *Part 3: Technical delivery conditions for fine-grain structural steels*

— *Part 4: Technical delivery conditions for high-yield-strength quenched and tempered structural steel plates*

The following parts are under preparation:

— *Part 5: Technical delivery conditions for structural steels with improved atmospheric corrosion resistance*

— *Part 6: Technical delivery conditions for seismic improved structural steels for building*

Structural steels —

Part 3:
Technical delivery conditions for fine-grain structural steels

1 Scope

This part of ISO 630 specifies requirements for flat and long products of hot-rolled weldable fine-grain structural steels in the as-rolled (for SG grades only), normalized/normalized-rolled and thermomechanical-rolled delivery conditions. It applies to steel plates rolled on a reversing mill, wide flats, hot-rolled sections and bars, which are intended for use in heavily loaded parts of welded or bolted structures.

This part of ISO 630 covers 11 grades and four qualities. Grades S275, S355, S420 and S460 are covered in Annex A. Grades SG245, SG290, SG325, SG345, SG365, SG415 and SG460 are covered in Annex B. Not all grades are available in all qualities, and some qualities have Charpy V-notch requirements.

This part of ISO 630 does not include the following structural steels, some of which are covered by other International Standards:

— Sheet and strip — refer to ISO TC 17/SC 12, *Continuous mill flat rolled products*;

— Tubular products — refer to ISO TC 5/SC 1, *Steel tubes*.

NOTE Lists of standards covered by ISO/TC 17/SC 12 and ISO/TC 5/SC 1 are available on the ISO Web site.

2 Normative references

The following referenced documents are indispensable for the application 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 630-1, *Structural steels — Part 1: General technical delivery conditions for hot-rolled products*

ISO 643, *Steels — Micrographic determination of the apparent grain size*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 630-1 and the following apply.

3.1
as-rolled
steel without any special rolling and/or heat treatment condition

3.2
normalized-rolled
steel rolled with a process in which the final deformation is carried out in a certain temperature range leading to a material condition equivalent to that obtained after normalizing so that the specified values of the mechanical properties are retained after normalizing

NOTE In international publications for both normalized rolling, as well as thermomechanical rolling, the expression “controlled rolling” may be found.