

INTERNATIONAL STANDARD

**ISO
6316**

Fifth edition
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Hot-rolled steel strip of structural quality

Feuillards laminés à chaud en acier de construction



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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 6316 was prepared by Technical Committee ISO/TC 17, *Steel*, Subcommittee SC 12, *Continuous mill flat rolled products*.

This fifth edition cancels and replaces the fourth edition (ISO 6316:2008), which has been technically revised.

Hot-rolled steel strip of structural quality

1 Scope

1.1 This International Standard specifies requirements for hot-rolled steel strip of structural quality in the grades and classes listed in Table 1, usually without the use of microalloying elements. This product is intended for structural purposes where particular mechanical properties are required. It is generally used in the delivered condition and is intended for bolted, riveted or welded structures. It is commonly rolled on a narrow strip mill.

1.2 This International Standard does not cover steels designated as commercial quality or drawing quality (covered in ISO 6317) or steels intended for boilers or pressure vessels, or steels to be rerolled to cold-reduced products, or steels designated as weathering steels, having increased atmospheric corrosion resistance.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the reference document (including any amendments) applies.

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

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

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1

microalloying elements

elements, such as niobium, vanadium, titanium, etc., added singly or in combination to obtain higher strength levels combined with better formability, weldability and toughness as compared with non-alloyed steel produced with equivalent strength levels

3.2

hot-rolled steel strip

product obtained by rolling heated steel (billet or slab) through a continuous-type mill to the required strip thickness, tolerances and other attributes set in this International Standard

Note 1 to entry: The product has a surface covered with oxide or scale resulting from the hot-rolling operation.

3.3

hot-rolled descaled steel strip

hot-rolled steel strip from the surface of which oxide or scale has been removed, commonly by pickling in an acid solution

Note 1 to entry: Descaling may also be performed by mechanical means such as grit blasting. Some increase in hardness and some loss of ductility can result from descaling.

Note 2 to entry: This product is normally supplied oiled.