
**Cold-reduced carbon steel sheet
according to hardness requirements**

*Tôles en acier au carbone laminées à froid à caractéristiques spéciales
de dureté*

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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 meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/TC 17, *Steel*, Subcommittee SC 12, *Continuous mill flat rolled products*.

This fourth edition cancels and replaces the third edition (ISO 5954:2007), which has been technically revised.

Cold-reduced carbon steel sheet according to hardness requirements

1 Scope

This International Standard applies to cold-reduced carbon steel sheet and corresponding hardness requirements. It is suitable for applications where the surface is of prime importance.

The following are common hardness ranges (see 6.6):

- CRH-50: Rockwell B 50 to 70;
- CRH-60: Rockwell B 60 to 80;
- CRH-70: Rockwell B 70 to 90;
- CRH-NN: Any Rockwell B range of 20 points up to and including HRB 90 maximum (designated minimum of specified range will be shown).

NOTE By agreement between the supplier and purchaser, Rockwell ranges less than 20 points can be specified.

This International Standard does not cover commercial quality or drawing qualities (covered in ISO 3574) and cold-reduced carbon steel strip.

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 referenced document (including any amendments) applies.

ISO 6508 (all parts), *Metallic materials — Rockwell hardness test*

ISO 16162, *Cold-rolled steel sheet products — Dimensional and shape tolerances*

3 Terms and definitions

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

3.1

cold-reduced steel sheet

product obtained from hot-rolled descaled steel sheet by cold-reducing to the required sheet thickness followed by annealing to recrystallize the grain structure

Note 1 to entry: The product is normally supplied in the skin-passed condition.

3.2

skin pass

light cold rolling of the product

Note 1 to entry: The purpose of the skin passing is one or more of the following:

- a) to minimize the appearance of coil breaks, stretcher strains, and fluting;
- b) to control the shape;