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Carbon and low alloy cast steels for general applications

Aciers moulés au carbone et faiblement alliés d'usage général

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Foreword

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For an explanation of 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 www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 17, *Steel*, Subcommittee SC 11, *Steel castings*.

This third edition cancels and replaces the second edition (ISO 14737:2015), which has been technically revised. The main changes compared to the previous edition are as follows:

— new Note was inserted in the Scope; previous Note 1 for Annex B was renumbered as Note 2;

— "Terms and Definitions" added as new Clause 3; subsequent Clauses were renumbered;

— footnote "a" to limit Cr, Mo, Ni, V, and Cu was added to GE200, GS200, GE240, and GS240 in Table 1. This makes it consistent with EN 10293;

— correction of thickness, *t*, for G10MnMoV6-3 in Table 2;

— correction of tempering temperature range for G25NiCrMo2-2.

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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Carbon and low alloy cast steels for general applications

1 Scope

This document specifies requirements for carbon and low alloy cast steel grades for general applications.

NOTE 1 Annex A provides guidance on welding.

NOTE 2 Annex B gives information on ISO grade designation and available UNS numbers which are similar to the ISO grade designation.

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 4990, *Steel castings — General technical delivery requirements*

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

3 Terms and definitions

No terms and definitions are listed in this document.

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/

4 General conditions for delivery

Steel castings supplied in accordance with this document shall conform to the applicable requirements of ISO 4990, including the supplementary requirements that are indicated in the inquiry and purchase order.

5 Chemical composition

The chemical composition shall conform to the values given in Table 1.

6 Heat treatment

The type of heat treatment is left to the discretion of the manufacturer unless otherwise agreed upon at the time of inquiry and order. Heat treatment described in Table 2 is for information only.

7 Mechanical properties

Mechanical properties are given in Table 2 and are subject to an agreement at the time of inquiry and order.

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