

BS ISO 11972:2015



BSI Standards Publication

Corrosion-resistant cast steels for general applications

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National foreword

This British Standard is the UK implementation of ISO 11972:2015.

The UK participation in its preparation was entrusted to Technical Committee ISE/111, Steel Castings and Forgings.

A list of organizations represented on this committee can be obtained on request to its secretary.

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Corrosion-resistant cast steels for general applications

Aciers moulés résistant à la corrosion pour applications courantes



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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).

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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/TC17, *Steel*, Subcommittee SC11, *Steel castings*.

This second edition cancels and replaces the first edition (ISO 11972:1998), which has been technically revised with the following changes:

- [Clause 7](#) revised;
- [Table 1](#) composition limits modified — various grades;
- [Tables 1, 2, and 3](#) — grade numbers added;
- [Annex A](#) added.

Corrosion-resistant cast steels for general applications

1 Scope

This International Standard specifies cast steels for general corrosion-resistant applications. The grades covered by this International Standard represent types of alloy steel castings suitable for broad ranges of application which are intended for a wide variety of corrosion applications.

NOTE [Annex A](#) gives information on ISO grade designation and available UNS numbers which are similar to the ISO grade designation.

2 Normative reference

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 4990, *Steel castings — General technical delivery conditions*

3 General conditions for delivery

Materials furnished according to this International Standard shall conform to the applicable requirements of ISO 4990 including the supplementary requirements that are indicated on the inquiry and purchase order.

4 Chemical composition

The steel shall conform to the requirements for chemical composition specified in [Table 1](#).

5 Mechanical properties

Steel used for castings shall conform to the mechanical property requirements given in [Table 2](#) up to the maximum ruling thickness. Verification of impact tests is not required except when indicated by the customer. Test blocks used to verify mechanical properties shall not have a thickness exceeding 150 mm. For samples removed from castings, the mechanical properties required shall be agreed between the manufacturer and purchaser.

6 Heat treatment

Castings shall be heat treated in accordance with the requirements in [Table 3](#).