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BS ISO 4990:2015



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Steel castings — General technical delivery requirements

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This British Standard is the UK implementation of ISO 4990:2015.

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Steel castings — General technical delivery requirements

*Pièces moulées en acier — Conditions techniques générales de
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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 11, *Steel castings*.

This third edition cancels and replaces the second edition (ISO 4990:2003), which has been technically revised with the following changes:

- [Clause 2](#): new and replacement normative references have been added;
- [3.1](#) has been revised;
- [4.2](#) has been developed;
- [6.2.2.1](#) has been moved to [6.2.3](#), and the subclauses have been renumbered;
- in [6.2.2.4](#), editorial changes have been carried out to eliminate confusion over paragraph identification and the last paragraph and the reference to ISO/TR 9769 have been deleted;
- 6.2.3.2.2 has been deleted and the contents moved to [6.2.3.2](#);
- [6.2.3.3](#) has been revised;
- [Clause 7](#) has been revised;
- [A.1.3](#) has been revised;
- A.3 has been deleted;
- [B.2.2](#), [B.4.2](#), and [B.4.4](#) have been revised;
- [Table 1](#) has been revised;
- Table 2 has been deleted;
- editorially revised.

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Steel castings — General technical delivery requirements

1 Scope

This International Standard specifies the general technical delivery requirements for the supply of steel, nickel, and cobalt alloy castings, including the requirements for the selection and preparation of samples and test pieces.

When a material or product standard differ from this delivery specification, the material or product standard shall apply. In the case of investment castings, ISO 16468 will apply.

This International Standard also specifies a group of supplementary requirements which may be applied to steel, nickel, and cobalt alloy castings. These requirements are provided for use when additional testing or inspection is desired and apply only when individually specified by the purchaser.

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

ISO 404:2013, *Steel and steel products — General technical delivery requirements*

ISO 3651-2, *Determination of resistance to intergranular corrosion of stainless steels — Part 2: Ferritic, austenitic and ferritic-austenitic (duplex) stainless steels — Corrosion test in media containing sulfuric acid*

ISO 4948-1, *Steels — Classification — Part 1: Classification of steels into unalloyed and alloy steels based on chemical composition*

ISO 4986, *Steel castings — Magnetic particle inspection*

ISO 4987, *Steel castings — Liquid penetrant inspection*

ISO 4992-1, *Steel castings — Ultrasonic examination — Part 1: Steel castings for general purposes*

ISO 4992-2, *Steel castings — Ultrasonic examination — Part 2: Steel castings for highly stressed components*

ISO 4993, *Steel and iron castings — Radiographic inspection*

ISO 6506-1, *Metallic materials — Brinell hardness test — Part 1: Test method*

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

ISO 6892-2, *Metallic materials — Tensile testing — Part 2: Method of test at elevated temperature*

ISO 6929:2013, *Steel products — Vocabulary*

ISO 10474, *Steel and steel products — Inspection documents*

ISO 11970, *Specification and approval of welding procedures for production welding of steel castings*

ISO 11971, *Steel and iron castings — Visual examination of surface quality*

ISO 14284, *Steel and iron — Sampling and preparation of samples for the determination of chemical composition*