# INTERNATIONAL STANDARD



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# Steel castings — Ultrasonic examination —

Part 1: Steel castings for general purposes

Pièces moulées en acier — Contrôle aux ultrasons — Partie 1: Pièces moulées en acier pour usages généraux



Reference number ISO 4992-1:2006(E)

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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 Maison 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 convertees is to prepare International Standards. Draft International Standards y the nal Stands. is drawn to the poss... 29-1 was prepared by Technical Common 992 consists of the following parts, under the Pene.. Part 1: Steel castings for general purposes Part 2: Steel castings for highly stressed components When the provide the providet the providet the providet the providet adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires applora 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 4992-1 was prepared by Technical Committee ISO/TC 17, Steel, Subcommittee SC 11, Steel castings.

ISO 4992 consists of the following parts, under the energy energy title Steel castings — Ultrasonic examination:

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## Steel castings — Ultrasonic examination —

# Part 1: Steel castings for general purposes

#### 1 Scope

This part of ISO 4992 specifies the requirements for the ultrasonic examination of steel castings (with ferritic structure) for general purposes, and the methods for determining internal discontinuities by the pulse-echo technique.

This part of ISO 4992 applies to the ultrasonic examination of steel castings which have usually received a grain-refining heat treatment and which have wall thicknesses up to and including 600 mm. For greater wall thicknesses, special agreements apply with respect to the test procedure and recording levels.

This part of ISO 4992 does not apply to automitic steels and joint welds.

#### 2 Normative references

The following referenced documents are indispensable for the application 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 5577, Non-destructive testing — Ultrasonic inspection Nocabulary

ISO 7963, Non-destructive testing — Ultrasonic testing — Specification for calibration block No. 2

EN 583-1, Non-destructive testing — Ultrasonic examination — Partic General principles

EN 583-2, Non-destructive testing — Ultrasonic examination — Part 2: Sepsitivity and range setting

EN 583-5, Non-destructive testing — Ultrasonic examination — Part Scharacterization and sizing of discontinuities

EN 1330-4, Non-destructive testing — Terminology — Part 4: Terms used in ultrasonic testing

EN 12223, Non-destructive testing — Ultrasonic examination — Specification for calibration block No. 1

EN 12668-1, Non-destructive testing — Characterization and verification of ultrasonic examination equipment — Part 1: Instruments

EN 12668-2, Non-destructive testing — Characterization and verification of ultrasonic examination equipment — Part 2: Probes

EN 12668-3, Non-destructive testing — Characterization and verification of ultrasonic examination equipment — Part 3: Combined equipment