TECHNICAL REPORT

# ISO/TR 15608

Third edition
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# Welding — Guidelines for a metallic materials grouping system

*Soudage — Lignes directrices pour un système de groupement des matériaux métalliques*

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# Contents

Page

# 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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

In exceptional circumstances, when a technical committee has collected data of a different kind from that which is normally published as an International Standard ("state of the art", for example), it may decide by a simple majority vote of its participating members to publish a Technical Report. A Technical Report is entirely informative in nature and does not have to be reviewed until the data it provides are considered to be no longer valid or useful.

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/TR 15608 was prepared by Technical Committee ISO/TC 44, *Welding and allied processes*, Subcommittee SC 10, *Unification of requirements in the field of metal welding*.

This third edition cancels and replaces the second edition (ISO/TR 15608:2005), which has been technically revised.

Requests for official interpretations of any aspect of this Technical Report should be directed to the Secretariat of ISO/TC 44/SC 10 via your national standards body. A complete listing of these bodies can be found at www.iso.org.



 

# Welding — Guidelines for a metallic materials grouping system



## 1 Scope

This Technical Report provides a uniform system for grouping of materials for welding purposes. It can also apply to other purposes, such as heat treatment, forming and non-destructive testing.

This Technical Report covers grouping systems for the following standardized materials:

— steels;

— aluminium and its alloys;

— copper and its alloys;

— nickel and its alloys;

— titanium and its alloys;

— zirconium and its alloys;

— cast irons.

## 2 Grouping system for steels

Steels are grouped as shown in Table 1. Only those elements that are specified in material standards or specifications shall be considered. The figures given in groups

— 1, 2, 3 and 11 refer to the chemical composition specified in the material standard (specified values), and

— 4 to 10 are based on the elemental content used in the designation of the alloys.