
**Welding consumables — Tubular
cored electrodes and rods for gas
shielded and non-gas shielded metal
arc welding of stainless and heat-
resisting steels — Classification**

*Produits consommables pour le soudage — Fils et baguettes fourrés
pour le soudage à l'arc avec ou sans protection gazeuse des aciers
inoxydables et des aciers résistant aux températures élevées —
Classification*

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Contents

Page

Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Classification	2
5 Symbols and requirements	2
5.1 General.....	2
5.2 Symbol for the product.....	3
5.3 Symbol for the chemical composition of all-weld metal.....	3
5.4 Symbol for type of core.....	19
5.5 Symbol for shielding gas.....	19
5.6 Symbol for welding position.....	20
6 Mechanical test	20
6.1 Preheating and interpass temperatures.....	20
6.2 Pass sequence.....	21
7 Chemical analysis	21
8 Rounding procedure	21
9 Retests	22
10 Technical delivery conditions	22
11 Examples of designation	22
Annex A (informative) Comparison charts of alloy designation according to nominal composition and alloy type	24
Annex B (informative) Description of types of core — Classification according to nominal composition	26
Annex C (informative) Description of types of tubular cored electrodes and rods — Classification according to alloy type	27
Annex D (informative) Considerations on weld metal ferrite contents	28
Bibliography	31

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 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 the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 44, *Welding and allied processes*, Subcommittee SC 3, *Welding consumables*.

This third edition cancels and replaces the second edition (ISO 17633:2010), which has been technically revised and contains the following changes:

- the chemical compositions and mechanical properties for a number of alloy designations have been updated;
- new alloy designations have been added;
- a limitation on Bi has been added to the footnotes of [Tables 1B-1](#), 1B-2, 1B-3 and 1B-4;
- the requirements for fillet weld testing have been removed following the same change in ISO 18276;
- the wording in clauses on chemical analysis, rounding procedure and retests has been updated;
- clarification has been brought when a product covers both electrodes and rods;
- additional examples for designations have been inserted.

Requests for official interpretations of any aspect of this document should be directed to the Secretariat of ISO/TC 44/SC 3 via your national standards body. A complete listing of these bodies can be found at www.iso.org.

Introduction

This document provides a classification system for tubular cored electrodes and rods for welding stainless and heat resisting steels. It recognizes that there are two somewhat different approaches in the global market to classifying a given tubular stainless steel welding consumable, and allows for either or both to be used, to suit a particular market need. Application of either type of classification designation (or of both, where suitable) identifies a product as classified in accordance with this document. The classification in accordance with system A was mainly based on EN 12073:1999. The classification in accordance with system B is mainly based upon standards used around the Pacific Rim.

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