INTERNATIONAL STANDARD

ISO 20378

First edition
2017-02

Welding consumables — Rods for gas welding of non-alloy and creep-resisting steels — Classification

Produits consommables pour le soudage — Baguettes pour le soudage aux gaz des aciers non alliés et des aciers résistant au fluage — Classification

Reference number
ISO 20378:2017(E)

ISO copyright office
Ch. de Blandonnet 8 • CP 401
CH-1214 Vernier, Geneva, Switzerland
Tel. +41 22 749 01 11
Fax +41 22 749 09 47
copyright@iso.org
www.iso.org

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.

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 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 document is based on EN 12536[1] and AWS A5.2/A5M[2].

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.

Welding consumables — Rods for gas welding of non-alloy and creep-resisting steels — Classification

1 Scope

This document specifies a classification for the designation of rods for gas welding of non-alloy and creep-resisting steels in terms of the chemical composition of the rod.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 544, *Welding consumables — Technical delivery conditions for filler materials and fluxes — Type of product, dimensions, tolerances and markings*

ISO 80000-1:2009, *Quantities and units — Part 1: General.* Corrected by ISO 80000-1:2009/Cor 1:2011

3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— IEC Electropedia: available at http://www.electropedia.org/

— ISO Online browsing platform: available at http://www.iso.org/obp

4 Classification

A rod shall be classified with the symbol for its chemical composition in accordance with Table 1. Information about welding behaviour is given in Annex A.

The classification is divided into two parts:

a) the first part gives a symbol indicating the product/process to be identified;

b) the second part gives a symbol indicating the chemical composition of the rod.

5 Symbols and requirements

5.1 Symbol for the product/process

The symbol for the rod used in the gas welding process shall be the letter “O”.

5.2 Symbol for the chemical composition of rods

The symbol in Table 1 indicates the chemical composition of the rod, determined under conditions given in Clause 6.