SLOVENSKI STANDARD
SIST EN ISO 21952:2012

01-september-2012

Nadomešča:
SIST EN ISO 21952:2008

Dodajni materiali za varjenje - Žice in palice za obločno varjenje v zaščitnih plinih jekel, odpornih proti lezenju - Razvrstitev (ISO 21952:2012)

Welding consumables - Wire electrodes, wires, rods and deposits for gas-shielded arc welding of creep-resisting steels - Classification (ISO 21952:2012)

Schweißzusätze - Drahtelektroden, Drähte, Stäbe und Schweißgut zum Schutzgasschweißen von warmfesten Stählen - Einteilung (ISO 21952:2012)

Produits consommables pour le soudage - Fils-électrodes, fils, baguettes et dépôts pour le soudage à l'arc sous protection gazeuse des aciers résistant au fluage - Classification (ISO 21952:2012)

Ta slovenski standard je istoveten z: **EN ISO 21952:2012**

ICS:

25.160.20 Potrošni material pri varjenju Welding consumables

SIST EN ISO 21952:2012 **en,fr**

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN ISO 21952

May 2012

ICS 25.160.20

Supersedes EN ISO 21952:2007

English Version

Welding consumables - Wire electrodes, wires, rods and deposits for gas shielded arc welding of creep-resisting steels - Classification (ISO 21952:2012)

Produits consommables pour le soudage - Fils-électrodes, fils, baguettes et dépôts pour le soudage à l'arc sous gaz de protection des aciers résistant au fluage - Classification (ISO 21952:2012)

Schweißzusätze - Drahtelektroden, Drähte, Stäbe und Schweißgut zum Schutzgasschweißen von warmfesten Stählen - Einteilung (ISO 21952:2012)

This European Standard was approved by CEN on 13 April 2012.

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This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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Ref. No. EN ISO 21952:2012: E

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Foreword

This document (EN ISO 21952:2012) has been prepared by Technical Committee ISO/TC 44 "Welding and allied processes" in collaboration with Technical Committee CEN/TC 121 “Welding” the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by November 2012, and conflicting national standards shall be withdrawn at the latest by November 2012.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN ISO 21952:2007.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 21952:2012 has been approved by CEN as a EN ISO 21952:2012 without any modification.

INTERNATIONAL STANDARD

ISO 21952

Second edition
2012-05-01

Welding consumables — Wire electrodes, wires, rods and deposits for gas shielded arc welding of creep-resisting steels — Classification

Produits consommables pour le soudage — Fils-électrodes, fils, baguettes et dépôts pour le soudage à l'arc sous gaz de protection des aciers résistant au fluage — Classification

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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.

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.

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 21952 was prepared by Technical Committee ISO/TC 44, *Welding and allied processes*, Subcommittee SC 3, *Welding consumables*.

This second edition cancels and replaces the first edition (ISO 21952:2007) which has been technically revised. The main changes compared to the previous edition are:

a) three new symbols have been added in 4.3B;

b) the gases designations in 4.4B have been updated in accordance with the latest edition of ISO 14175;

c) six new alloys have been added in Tables 1 and 2 on the B side;

d) Clause 6 has been revised to make it clearer;

e) the examples in Clause 10 have been revised.

Requests for official interpretations of any aspect of this International Standard 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 International Standard was prepared in collaboration with the International Institute of Welding. It recognizes that there are two somewhat different approaches in the global market to classifying a given wire electrode, wire, rod or deposit, 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 International Standard. The classification in accordance with system A is mainly based on EN 12070:1999[1]. The classification in accordance with system B is mainly based upon standards used around the Pacific Rim.

This International Standard proposes a classification system for wire electrodes, wires and rods in terms of their chemical composition and, where required, in terms of the yield strength, tensile strength and elongation of the all-weld metal deposit. The ratio of yield to tensile strength of weld metal is generally higher than that of parent metal. Users should note that matching weld metal yield strength to parent metal yield strength does not necessarily ensure that the weld metal tensile strength matches that of the parent material. Where the application requires matching tensile strength, therefore, selection of the consumable should be made by reference to column 4 of Table 2.

It should be noted that the mechanical properties of all-weld metal test pieces used to classify the electrodes, wires and rods vary from those obtained in production joints because of differences in welding procedure such as electrode size, width of weave, welding position and material composition.