SLOVENSKI STANDARD
SIST EN ISO 5182:2011

01-december-2011

Uporovno varjenje - Materiali za elektrode in pomožno opremo (ISO 5182:2008)

Resistance welding - Materials for electrodes and ancillary equipment (ISO 5182:2008)

Widerstandsschweißen - Werkstoffe für Elektroden und Hilfseinrichtungen (ISO 5182:2008)

Soudage par résistance - Matériaux pour électrodes et équipements annexes (ISO 5182:2008)

Ta slovenski standard je istoveten z: **EN ISO 5182:2009**

ICS:

25.160.20 Potrošni material pri varjenju Welding consumables

SIST EN ISO 5182:2011 **en,fr,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 5182

April 2009

ICS 25.160.20

English Version

Resistance welding - Materials for electrodes and ancillary equipment (ISO 5182:2008)

Soudage par résistance - Matériaux pour électrodes et équipements annexes (ISO 5182:2008)

Widerstandsschweißen - Werkstoffe für Elektroden und Hilfseinrichtungen (ISO 5182:2008)

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

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Foreword

The text of ISO 5182:2008 has been prepared by Technical Committee ISO/TC 44 “Welding and allied processes” of the International Organization for Standardization (ISO) and has been taken over as EN ISO 5182:2009 by 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of an identical text or by endorsement, at the latest by October 2009, and conflicting national standards shall be withdrawn at the latest by October 2009.

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Endorsement notice

The text of ISO 5182:2008 has been approved by CEN as a EN ISO 5182:2009 without any modification.

INTERNATIONAL STANDARD

ISO 5182

Third edition
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Resistance welding — Materials for electrodes and ancillary equipment

Soudage par résistance — Matériaux pour électrodes et équipements annexes

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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.

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ISO 5182 was prepared by Technical Committee ISO/TC 44, *Welding and allied processes*, Subcommittee SC 6, *Resistance welding*.

This third edition cancels and replaces the second edition (ISO 5182:1991), which has been technically revised.

Requests for official interpretations of any aspect of this International Standard should be directed to the Secretariat of ISO/TC 44/SC 6 via your national standards body, a complete listing of which can be found at www.iso.org.

Resistance welding — Materials for electrodes and ancillary equipment

1 Scope

This International Standard specifies the characteristics of materials for resistance welding electrodes and ancillary equipment which are used for carrying current and transmitting force to the work.

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 6507-1, *Metallic materials — Vickers hardness test — Part 1: Test method*

ASTM E1004, *Standard practice for determining electrical conductivity using the electromagnetic (eddy-current) method*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1
softening temperature
maximum temperature that, if maintained for 2 h, will result in a reduction in ambient temperature hardness of a maximum of 15 % of the “as received” value

4 Classification

4.1 Group A — Copper and copper alloys

This group defines four types of material:

Type 1: Non-heat-treatable alloys of high conductivity and medium hardness, the wrought forms of which are given their strengths by cold working during manufacture.

Type 2: Alloys which are harder than type 1 and in which the mechanical properties have been developed by heat treatment during manufacture or by a combination of heat treatment and cold working.

Type 3: Heat-treated alloys which have superior mechanical properties to type 2 but a lower electrical conductivity than either type 1 or type 2.

Type 4: Alloys having certain specialised properties which may, in some cases, be obtained either by cold working or by heat treatment. Alloys of this type are not necessarily interchangeable with each other.