



SLOVENSKI STANDARD
SIST EN ISO 17657-1:2007

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**Uporovno varjenje - Merjenje jakosti varilnega toka pri uporovnem varjenju - 1. del:
Smernice za merjenje (ISO 17657-1:2005)**

Resistance welding - Welding current measurement for resistance welding - Part 1:
Guidelines for measurement (ISO 17657-1:2005)

Widerstandsschweißen - Schweißstrommessung für das Widerstandsschweißen - Teil 1:
Leitfaden für die Messung (ISO 17657-1:2005)

Soudage par résistance - Mesurage des courants en soudage par résistance - Partie 1:
Lignes directrices pour le mesurage (ISO 17657-1:2005)

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25.160.10 Varilni postopki in varjenje Welding processes

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ICS 25.160.10

English Version

Resistance welding - Welding current measurement for
resistance welding - Part 1: Guidelines for measurement (ISO
17657-1:2005)

Soudage par résistance - Mesurage des courants en
soudage par résistance - Partie 1: Lignes directrices pour le
mesurage (ISO 17657-1:2005)

Widerstandsschweißen - Schweißstrommessung für das
Widerstandsschweißen - Teil 1: Leitfaden für die Messung
(ISO 17657-1:2005)

This European Standard was approved by CEN on 19 May 2007.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN Management Centre or to any CEN member.

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 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

Management Centre: rue de Stassart, 36 B-1050 Brussels

Foreword

The text of ISO 17657-1:2005 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 17657-1:2007 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 December 2007, and conflicting national standards shall be withdrawn at the latest by December 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, 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 and United Kingdom.

Endorsement notice

The text of ISO 17657-1:2005 has been approved by CEN as a EN ISO 17657-1:2007 without any modification.

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**Resistance welding — Welding current
measurement for resistance welding —
Part 1:
Guidelines for measurement**

*Soudage par résistance — Mesurage des courants en soudage par
résistance —
Partie 1: Lignes directrices pour le mesurage*

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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 17657-1 was prepared by Technical Committee ISO/TC 44, *Welding and allied processes*, Subcommittee SC 6, *Resistance welding*.

ISO 17657 consists of the following parts, under the general title *Resistance welding — Welding current measurement for resistance welding*:

- Part 1: *Guidelines for measurement*
- Part 2: *Welding current meter with current sensing coil*
- Part 3: *Current sensing coil*
- Part 4: *Calibration system*
- Part 5: *Verification of welding current measuring system*

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Introduction

Requests for official interpretations of any aspect of this part of ISO 17657 should be directed to the Secretariat of ISO/TC 44/SC 6 via your national standards body. A complete listing of these bodies can be found at <http://www.iso.org>.

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Resistance welding — Welding current measurement for resistance welding —

Part 1: Guidelines for measurement

1 Scope

This part of ISO 17657 specifies equipment for the calibration of measuring systems of welding current and indicating weld time in resistance welding using single-phase alternating current of frequency 50 Hz or 60 Hz, or direct current.

The guidelines define various basic terms for the measurement of welding current, and give some basic information for users of welding current measuring systems including welding current meters with current sensing coil.

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2 Normative references (standards.iteh.ai)

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 669, *Resistance welding — Resistance welding equipment — Mechanical and electrical requirements*

ISO 17657-2:2005, *Resistance welding — Welding current measurement for resistance welding — Part 2: Welding current meter with current sensing coil*

ISO 17657-3, *Resistance welding — Welding current measurement for resistance welding — Part 3: Current sensing coil*

ISO 17657-4, *Resistance welding — Welding current measurement for resistance welding — Part 4: Calibration system*

ISO 17657-5, *Resistance welding — Welding current measurement for resistance welding — Part 5: Verification of welding current measuring system*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 669 and the following apply.

3.1 test

technical operation that consists of the determination of one or more characteristics or performance of a given product or equipment according to a specified procedure