INTERNATIONAL STANDARD



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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



Reference number ISO 17657-1:2005(E)

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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 traison 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 convertees 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 applying 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 gentifying 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.

rig coil en Oenenhende Dy The the general title Resistance welding - Welding current ISO 17657 consists of the following parts, under 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

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.

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

ISO 17657-2:2005, Resistance welding — Welding current preasurement 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

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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