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**Resistance welding — Transformer-
rectifier for welding guns with integrated
transformers — Transformer-rectifier
units operating at 1 000 Hz frequency**

*Soudage par résistance — Transformateurs-redresseurs pour pistolets
de soudage à transformateur incorporé — Transformateurs-redresseurs
alimentés sous une fréquence de 1 000 Hz*



Reference number
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Foreword

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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 22829 was prepared by Technical Committee ISO/TC 44, *Welding and allied processes*, Subcommittee SC 6, *Resistance welding*.

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 these bodies can be found at www.iso.org.

This corrected version incorporates an updated second paragraph in 11.3.9.

Resistance welding — Transformer-rectifier for welding guns with integrated transformers — Transformer-rectifier units operating at 1 000 Hz frequency

1 Scope

This International Standard is applicable to transformer-rectifier units as used in electric resistance welding machines operating from a power supply with a frequency of 1 000 Hz, and of a rated value of the input voltage equal to or higher than 500 V. These transformer-rectifier units are primarily used in welding guns with an integrated transformer.

For these transformer units, this International Standard supplements the requirements given in ISO 5826 and ISO 10656, which remain applicable except where amended by this International Standard.

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 5826:1999, *Resistance welding equipment — Transformers — General specifications applicable to all transformers*

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*

3 Terms and definitions

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

3.1

transformer-rectifier unit

transformer incorporating a full-wave rectifier in its secondary circuit

3.2

input voltage

U_1

root-mean-square (RMS) value of the voltage applied to the primary terminals of the transformer-rectifier unit

3.3

rated supply voltage

U_{1N}

RMS value of the supply voltage (applied to the primary terminals) for which the transformer-rectifier unit is constructed