



# SLOVENSKI STANDARD SIST EN ISO 22829:2018

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Nadomešča:  
SIST EN ISO 22829:2008

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**Oprema za uporovno varjenje - Transformatorji - Enote z vgrajenim transformatorjem-usmernikom za varilne klešče pri frekvenci 1000 Hz (ISO 22829:2017)**

Resistance welding equipment - Transformers - Integrated transformer-rectifier units for welding guns operating at 1 000 Hz (ISO 22829:2017)

**iTeh STANDARD PREVIEW**

Widerstandsschweißeinrichtungen - Transformatoren - Integrierte Transformatoren-Gleichrichtereinheiten für Schweißzangen mit einer Arbeitsfrequenz von 1000 Hz (ISO 22829:2017)

[SIST EN ISO 22829:2018](https://standards.iteh.ai/catalog/standards/sist/79fe3a19-f6a9-4c15-9a71-2018/Soudage-resistance-22829-2018)

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Équipement de soudage par résistance - Transformateurs - Transformateurs-redresseurs pour pinces de soudage à transformateur incorporé alimentés sous une fréquence de 1000 Hz (ISO 22829:2017)

**Ta slovenski standard je istoveten z: EN ISO 22829:2017**

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**ICS:**

25.160.30	Varilna oprema	Welding equipment
29.180	Transformatorji. Dušilke	Transformers. Reactors

**SIST EN ISO 22829:2018** en,fr,de

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EUROPEAN STANDARD

EN ISO 22829

NORME EUROPÉENNE

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## Resistance welding equipment - Transformers - Integrated transformer-rectifier units for welding guns operating at 1 000 Hz (ISO 22829:2017)

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- Integrierte Transformatoren-Gleichrichtereinheiten  
für Schweißzangen mit einer Arbeitsfrequenz von  
1000 Hz (ISO 22829:2017)

This European Standard was approved by CEN on 23 August 2017.

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EUROPÄISCHES KOMITEE FÜR NORMUNG

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<b>Contents</b>	<b>Page</b>
<b>European foreword.....</b>	<b>3</b>

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## European foreword

This document (EN ISO 22829:2017) has been prepared by Technical Committee ISO/TC 44 “Welding and allied processes” in collaboration with Technical Committee CEN/TC 121 “Welding and allied processes” 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 April 2018, and conflicting national standards shall be withdrawn at the latest by April 2018.

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

This document supersedes EN ISO 22829:2008.

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

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STANDARD

ISO  
22829

Second edition  
2017-09

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**Resistance welding equipment —  
Transformers — Integrated  
transformer-rectifier units for welding  
guns operating at 1 000 Hz**

*Équipement de soudage par résistance — Transformateurs  
— Transformateurs-redresseurs pour pinces de soudage à  
transformateur incorporé alimentés sous une fréquence de 1000 Hz*

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<b>Contents</b>	<b>Page</b>
<b>Foreword</b> .....	<b>iv</b>
<b>1 Scope</b> .....	<b>1</b>
<b>2 Normative references</b> .....	<b>1</b>
<b>3 Terms and definitions</b> .....	<b>1</b>
<b>4 Power supply to the transformer-rectifier unit</b> .....	<b>1</b>
<b>5 Transformer types</b> .....	<b>2</b>
<b>6 Dimensions</b> .....	<b>2</b>
<b>7 Additional equipment</b> .....	<b>3</b>
7.1 Grounding provision.....	3
7.2 Thermal protection.....	3
7.3 Output current sensing coil.....	3
7.4 Output voltage sensing wires.....	3
<b>8 Protection of the rectifier</b> .....	<b>3</b>
<b>9 Marking</b> .....	<b>3</b>
9.1 Primary.....	3
9.2 Output terminals.....	3
9.3 Rating plate.....	4
<b>10 Designation</b> .....	<b>4</b>
<b>11 Test conditions</b> .....	<b>4</b>
11.1 Type tests.....	4
11.2 Routine tests.....	5
11.3 Test procedures.....	5
11.3.1 General visual examination.....	5
11.3.2 Open-circuit tests.....	5
11.3.3 Minimum output current under load condition.....	5
11.3.4 Cooling circuit test.....	5
11.3.5 Dynamic behaviour of the output terminals.....	5
11.3.6 Mechanical strength.....	7
<b>Annex A (informative) Relationship between output current and duty factor</b> .....	<b>8</b>
<b>Annex B (normative) Dimensions of transformers</b> .....	<b>9</b>
<b>Bibliography</b> .....	<b>15</b>

## ISO 22829:2017(E)

## 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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html). (standards.iteh.ai)

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

This second edition cancels and replaces the first edition (ISO 22829:2007), which has been technically revised.

Requests for official interpretations of any aspect of this document 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](http://www.iso.org).

# Resistance welding equipment — Transformers — Integrated transformer-rectifier units for welding guns operating at 1 000 Hz

## 1 Scope

This document specifies additional requirements to those given in ISO 5826 for single-phase inverter transformers with connected rectifier for DC welding. This document applies to transformers, primarily used in welding guns, operating at 1 000 Hz with a rated input voltage of 500 V or more.

The requirements of ISO 5826 shall be followed unless amended by this document.

## 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 5826, *Resistance welding equipment — Transformers — General specifications applicable to all transformers*

ISO 17677-1, *Resistance welding — Vocabulary — Part 1: Spot, projection and seam welding*

IEC 60417:2002, *Graphical symbols for use on equipment*

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 669, ISO 5826 and ISO 17677-1 and the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <http://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

### 3.1

#### output DC current

$I_{2d}$

root-mean-square (RMS) value of the direct current at the output terminals of the transformer-rectifier unit

### 3.2

#### on time

$t_s$

time during which the current is applied

## 4 Power supply to the transformer-rectifier unit

The rated voltage supply shall be delivered by an inverter. This inverter shall deliver the rated voltage at a frequency of 1 000 Hz in a waveform to suit the transformer-rectifier unit characteristics.