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Destructive tests on welds in metallic materials - Longitudinal tensile test on weld metal in fusion welded joints (ISO 5178:2019)

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 07/19

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English Version

Destructive tests on welds in metallic materials - Longitudinal tensile test on weld metal in fusion welded joints (ISO 5178:2019)

Essais destructifs des soudures sur matériaux
métalliques - Essai de traction longitudinale du métal
fondu des assemblages soudés par fusion (ISO
5178:2019)

Zerstörende Prüfung von Schweißverbindungen an
metallischen Werkstoffen - Längszugversuch an
Schweißgut in Schmelzschweißverbindungen (ISO
5178:2019)

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EN ISO 5178:2019 (E)

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European foreword

This document (EN ISO 5178:2019) 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of an identical text or by endorsement, at the latest by August 2019, and conflicting national standards shall be withdrawn at the latest by August 2019.

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Endorsement notice

The text of ISO 5178:2019 has been approved by CEN as EN ISO 5178:2019 without any modification.

INTERNATIONAL STANDARD

ISO 5178

Second edition
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Destructive tests on welds in metallic materials — Longitudinal tensile test on weld metal in fusion welded joints

*Essais destructifs des soudures sur matériaux métalliques — Essai
de traction longitudinale du métal fondu des assemblages soudés
par fusion*



Reference number
ISO 5178:2019(E)

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ISO 5178:2019(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).

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This document was prepared by Technical Committee ISO/TC 44, *Welding and allied processes*, Subcommittee SC 5, *Testing and inspection of welds*.

Any feedback, question or request for official interpretation related to any aspect of this document should be directed to the Secretariat of ISO/TC 44/SC 5 via your national standards body. A complete listing of these bodies can be found at www.iso.org/members.html. Official interpretations, where they exist, are available from this page: <https://committee.iso.org/sites/tc44/home/interpretation.html>.

This second edition cancels and replaces the first edition (ISO 5178:2001), which has been technically revised. The main changes compared to the previous edition are as follows:

- the normative reference has been revised from ISO 6892 to ISO 6892-1;
- new mandatory [Clause 3](#) has been added;
- [Clauses 5](#) and [9](#) have been improved.

Destructive tests on welds in metallic materials — Longitudinal tensile test on weld metal in fusion welded joints

1 Scope

This document specifies the sizes of test specimens and the test procedure for carrying out longitudinal tensile tests on cylindrical test specimens in order to determine the mechanical properties of weld metal in a fusion welded joint.

This document applies to metallic materials in all forms of product with joints made by any fusion welding process, having joint sizes that are sufficient to obtain cylindrical test specimens with dimensions in accordance with ISO 6892-1.

Unless specified otherwise for specific points in this document, the general principles of ISO 6892-1 apply.

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 6892-1, *Metallic materials — Tensile testing — Part 1: Method of test at room temperature*

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