

Non-destructive testing of welds - Time-of-flight diffraction technique (TOFD) - Acceptance levels (ISO 15626:2018)

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 15626:2018 sisaldab Euroopa standardi EN ISO 15626:2018 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 15626:2018 consists of the English text of the European standard EN ISO 15626:2018.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
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English Version

Non-destructive testing of welds - Time-of-flight
diffraction technique (TOFD) - Acceptance levels (ISO
15626:2018)

Essais non destructifs des assemblages soudés -
Technique de diffraction des temps de vol (méthode
TOFD) - Niveaux d'acceptation (ISO 15626:2018)

Zerstörungsfreie Prüfung von Schweißverbindungen -
Beugungslaufzeittechnik (TOFD) -
Zulässigkeitsgrenzen (ISO 15626:2018)

This European Standard was approved by CEN on 14 July 2018.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
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European foreword

This document (EN ISO 15626:2018) 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of an identical text or by endorsement, at the latest by February 2019, and conflicting national standards shall be withdrawn at the latest by February 2019.

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 15626:2013.

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.

Endorsement notice

The text of ISO 15626:2018 has been approved by CEN as EN ISO 15626:2018 without any modification.

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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.

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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For an explanation of 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 www.iso.org/iso/foreword.html.

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 15626:2011), which has been technically revised. The main changes compared to the previous edition are as follows:

- in [6.3.1](#), method 4 has been described;
- for all figures, the keys have been completed.

Non-destructive testing of welds — Time-of-flight diffraction technique (TOFD) — Acceptance levels

1 Scope

This document specifies acceptance levels for the time-of-flight diffraction technique (TOFD) of full penetration welds in ferritic steels from 6 mm up to 300 mm thickness which correspond to the quality levels of ISO 5817.

These acceptance levels are applicable to indications classified in accordance with ISO 10863.

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 5577, *Non-destructive testing — Ultrasonic testing — Vocabulary*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 5577 and the following apply.

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

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

3.1

embedded discontinuity

discontinuity within the volume of the material, separated from the surfaces

3.2

surface-breaking discontinuity

discontinuity connected to the near (scanning) surface or far (opposite) surface

4 Symbols

h height of an indication

l length of an indication

t nominal wall thickness in accordance with construction drawing or dimension table

5 Relation between quality levels and acceptance levels

Three different acceptance levels are defined. The relation between these acceptance levels and the quality levels as mentioned in ISO 5817 are given in [Table 1](#).