Non-destructive testing of welds - Time-of-flight diffraction technique (TOFD) - Acceptance levels (ISO Sold Broken Condition Cond 15626:2011)



EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

| See Eesti standard EVS-EN ISO 15626:2013 | This Estonian standard EVS-EN ISO 15626:2013 |
|---|--|
| sisaldab Euroopa standardi EN ISO 15626:2013 | consists of the English text of the European standard |
| ingliskeelset teksti. | EN ISO 15626:2013. |
| S | |
| ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | This standard has been endorsed with a notification |
| avaldamisega EVS Teatajas. | published in the official bulletin of the Estonian Centre for Standardisation. |
| | Tor Startuardisation. |
| Euroopa standardimisorganisatsioonid on teinud | Date of Availability of the European standard is |
| | 14.08.2013. |
| kättesaadavaks 14.08.2013. | |
| | |
| Standard on kättesaadav Eesti Standardikeskusest. | The standard is available from the Estonian Centre for |
| | Standardisation. |

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

ICS 25.160.40

Standardite reprodutseerimise ja levitamise õigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonsesse süsteemi või edastamine ükskõik millises vormis või millisel teel ilma Eesti Standardikeskuse kirjaliku loata on keelatud.

Kui Teil on küsimusi standardite autorikaitse kohta, võtke palun ühendust Eesti Standardikeskusega: Aru 10, 10317 Tallinn, Eesti; <u>www.evs.ee</u>; telefon 605 5050; e-post <u>info@evs.ee</u>

The right to reproduce and distribute standards belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without a written permission from the Estonian Centre for Standardisation.

If you have any questions about copyright, please contact Estonian Centre for Standardisation: Aru 10, 10317 Tallinn, Estonia; www.evs.ee; phone 605 5050; e-mail info@evs.ee

EUROPEAN STANDARD

EN ISO 15626

NORME EUROPÉENNE EUROPÄISCHE NORM

August 2013

ICS 25.160.40

Supersedes EN 15617:2009

English Version

Non-destructive testing of welds - Time-of-flight diffraction technique (TOFD) - Acceptance levels (ISO 15626:2011)

Contrôle non destructif des assemblages soudés -Technique de diffraction des temps de vol (TOFD) -Niveaux d'acceptation (ISO 15626:2011) Zerstörungsfreie Prüfung von Schweißverbindungen -Beugungslaufzeittechnik (TOFD) - Zulässigkeitsgrenzen (ISO 15626:2011)

This European Standard was approved by CEN on 8 August 2013.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of 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, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: Avenue Marnix 17, B-1000 Brussels

Foreword

The text of ISO 15626:2011 has been prepared by Technical Committee ISO/TC 44 "Welding and allied processes" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 15626:2013 by Technical Committee CEN/TC 121 "Welding" 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 2014, and conflicting national standards shall be withdrawn at the latest by February 2014.

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

This document supersedes EN 15617:2009.

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, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 15626:2011 has been approved by CEN as EN ISO 15626:2013 without any modification.

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

1 Scope

This International Standard 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 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 5817, Welding — Fusion-welded joints in steel, nickel, titanium and their alloys (beam welding excluded) — Quality levels for imperfections (ISO 5817:2003, corrected version:2005, including Technical Corrigendum 1:2006)

ISO 10863, Non-destructive testing of welds — Ultrasonic testing — Use of time-of-flight diffraction technique (TOFD)¹⁾

3 Symbols, terms and definitions

3.1 Symbols

- h height of an indication (see Figures 1, 2 and 3)
- length of an indication (see Figures 1, 2 and 3)
- nominal wall thickness in accordance with construction drawing or dimension table (see Figures 1, 2 and 3)

3.2 Terms and definitions

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

3.2.1

embedded discontinuity

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

3.2.2

surface-breaking discontinuity

discontinuity connected to the near (contact) surface or far (reflecting) surface

1

¹⁾ To be published.