

**Non-destructive testing of welded joints
in thermoplastics semifinished
products - Part 3: Ultrasonic testing**

Non-destructive testing of welded joints in
thermoplastics semifinished products - Part 3:
Ultrasonic testing

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 13100-3:2005 sisaldab Euroopa standardi EN 13100-3:2004 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 25.01.2005 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 13100-3:2005 consists of the English text of the European standard EN 13100-3:2004.</p> <p>This document is endorsed on 25.01.2005 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala: This European Standard specifies methods for the manual ultrasonic examination of heated tool, electrofusion, extrusion and hot gas joints in plastics materials. It applies to joints in single wall pipes and plates. The range of thicknesses covered is from 10 mm to 100 mm. This standard does not specify acceptance levels of the indications.</p>	<p>Scope: This European Standard specifies methods for the manual ultrasonic examination of heated tool, electrofusion, extrusion and hot gas joints in plastics materials. It applies to joints in single wall pipes and plates. The range of thicknesses covered is from 10 mm to 100 mm. This standard does not specify acceptance levels of the indications.</p>
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ICS 25.160.40

Võtmesõnad: nondestructive tests, personnel, plastics, semi-finished products, specification (approval), specifications, testing, testing conditions, testing devices, thermoplastic, thermoplastic polymers, ultrasonic testing, weld seam testing, welded joints, welding, welds

ICS 25.160.40

English version

Non destructive testing of welded joints in thermoplastics semi-finished products - Part 3: Ultrasonic testing

Contrôle non destructif des assemblages soudés sur produits semi-finis en thermoplastiques - Partie 3 : Contrôle par ultrasons

Zerstörungsfreie Prüfung von Schweißverbindungen thermoplastischer Kunststoffe - Teil 3: Ultraschallprüfung

This European Standard was approved by CEN on 14 October 2004.

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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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Foreword

This document (EN 13100-3:2004) has been prepared by Technical Committee CEN/TC 249 "Plastics", the secretariat of which is held by IBN.

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 May 2005, and conflicting national standards shall be withdrawn at the latest by May 2005.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

1 Scope

This document specifies methods for the manual ultrasonic examination of heated tool, electrofusion, extrusion and hot gas joints in plastics materials. It applies to joints in single wall pipes and plates. The range of thicknesses covered is from 10 mm to 100 mm.

This document does not specify acceptance levels of the indications.

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.

EN 473, *Non-destructive testing — Qualification and certification of NDT personnel — General principles*

EN 583-2, *Non-destructive testing — Ultrasonic examination — Part 2: Sensitivity and range setting*

EN 583-4, *Non-destructive testing — Ultrasonic examination — Part 4: Examination for discontinuities perpendicular to the surface*

EN 1330-2:1998, *Non-destructive testing — Terminology — Part 2: Terms common to the non-destructive testing methods*

EN 1330-4:2000, *Non-destructive testing — Terminology — Part 4: Terms used in ultrasonic testing*

EN 12668-1, *Non-destructive testing — Characterization and verification of ultrasonic examination equipment — Part 1: Instruments*

EN 12668-2, *Non-destructive testing — Characterization and verification of ultrasonic examination equipment — Part 2: Probes*

EN 12668-3, *Non-destructive testing — Characterization and verification of ultrasonic examination equipment — Part 3: Combined equipment*

ENV 583-6, *Non-destructive testing — Ultrasonic examination — Part 6: Time-of-flight diffraction technique as a method for detection and sizing of discontinuities*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 1330-2:1998 and EN 1330-4:2000 apply.

4 Symbols and designations

Symbols and designations are given in Table 1.