

**Non-destructive testing - Ultrasonic testing -
Characterization and verification of ultrasonic thickness
measuring equipment**

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 15317:2013 sisaldab Euroopa standardi EN 15317:2013 inglisekeelset teksti.	This Estonian standard EVS-EN 15317:2013 consists of the English text of the European standard EN 15317:2013.
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 - Ultrasonic testing - Characterization and verification of ultrasonic thickness measuring equipment

Essais non destructifs - Contrôle ultrasonore -
Caractérisation et vérification des appareils de mesure de
l'épaisseur par ultrasons

Zerstörungsfreie Prüfung - Ultraschallprüfung -
Charakterisierung und Verifizierung der Ultraschall-
Prüfausrüstung zur Dickenmessung

This European Standard was approved by CEN on 29 September 2013.

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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.

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Contents

Page

Foreword.....	4
1 Scope	5
2 Normative references	5
3 Terms and definitions	5
4 General requirements for compliance.....	5
5 Manufacturer's technical specification for ultrasonic thickness measuring equipment.....	6
5.1 General.....	6
5.2 General attributes	6
5.3 Display	6
5.4 Transmitter	7
5.5 Receiver	7
5.6 Other information.....	7
6 Calibration blocks.....	7
6.1 General.....	7
6.2 Material	8
6.3 Shape and size	8
6.3.1 Accuracy blocks	8
6.3.2 Resolution block (see Figure 1)	9
7 Performance requirements for ultrasonic thickness measuring equipment	9
8 Probes.....	11
9 Group 1 tests.....	11
9.1 General.....	11
9.2 Equipment required for Group 1 tests.....	11
9.3 Stability against temperature	12
9.3.1 Procedure	12
9.3.2 Acceptance criterion	12
9.4 Low battery warning.....	12
9.4.1 Procedure	12
9.4.2 Acceptance criterion	12
9.5 Battery operational time.....	12
9.5.1 Procedure	12
9.5.2 Acceptance criterion	12
9.6 Operational voltage range	13
9.6.1 Procedure	13
9.6.2 Acceptance criterion	13
9.7 Operational current range.....	13
9.7.1 Procedure	13
9.7.2 Acceptance criterion	13
9.8 Operational temperature range	13
9.8.1 General.....	13
9.8.2 Procedure	13
9.8.3 Acceptance criterion	13
9.9 Pulse repetition frequency, PRF	14
9.9.1 Procedure	14
9.9.2 Acceptance criterion	14

9.10	Transmitter pulse shape, rise-time and peak voltage	14
9.10.1	Procedure	14
9.10.2	Acceptance criterion	15
9.11	Receiver frequency range of operation.....	16
9.11.1	Procedure	16
9.11.2	Acceptance criterion	16
9.12	Minimum and maximum measurable thicknesses	16
9.12.1	Procedure	16
9.12.2	Acceptance criterion	16
9.13	Accuracy and resolution.....	16
9.13.1	Procedure	16
9.13.2	Acceptance criterion	16
9.14	Range of velocity setting (calibration)	16
9.15	Calibration mechanisms	16
9.15.1	General	16
9.15.2	Procedure	16
9.15.3	Acceptance criterion	17
9.16	Calibration setting storage	17
9.16.1	Procedure	17
9.16.2	Acceptance criterion	17
9.17	Data storage	17
9.17.1	Procedure	17
9.17.2	Acceptance criterion	17
9.18	Printing	17
9.18.1	Procedure	17
9.18.2	Acceptance criterion	18
9.19	Display and recall	18
9.19.1	Procedure	18
9.19.2	Acceptance criterion	18
9.20	Display response time	18
9.20.1	Procedure	18
9.20.2	Acceptance criterion	18
10	Group 2 tests	18
10.1	General	18
10.2	Equipment required for Group 2 tests	18
10.3	General characteristics.....	19
10.4	General mechanical state and external aspects	19
11	Group 3 tests	19
11.1	General	19
11.2	General mechanical state and external aspects	19
11.3	Calibration mechanisms	19
11.3.1	Procedure	19
11.3.2	Acceptance criterion	19
11.4	Calibration setting storage	20
11.4.1	Procedure	20
11.4.2	Acceptance criterion	20
11.5	Data storage	20
11.5.1	Procedure	20
11.5.2	Acceptance criterion	20
	Bibliography.....	21

Foreword

This document (EN 15317:2013) has been prepared by Technical Committee CEN/TC 138 "Non-destructive testing", the secretariat of which is held by AFNOR.

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 2014, and conflicting national standards shall be withdrawn at the latest by May 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 15317:2007.

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1 Scope

This European Standard specifies methods and acceptance criteria for assessing the performance of instruments for measuring thickness using pulse-echo ultrasound.

This European Standard covers both direct (digital) reading and waveform display types using single or dual element probes.

This European Standard may be used for verifying equipment covered by EN 12668-1, EN 12668-2 and EN 12668-3 when used for thickness measurement.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

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

EN 10025-2, *Hot rolled products of structural steels - Part 2: Technical delivery conditions for non-alloy structural steels*

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 14127, *Non-destructive testing - Ultrasonic thickness measurement*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 1330-4 and EN 12668-1 apply.

4 General requirements for compliance

Ultrasonic thickness measuring equipment complies with this standard if it satisfies all the following conditions:

- a) ultrasonic instrument and probe comply with the technical requirements of this European Standard;
- b) either a declaration of conformity, issued by an organisation certified in accordance with EN ISO 9001; or
a certificate issued by an organization accredited according to EN ISO/IEC 17050-1 and EN ISO/IEC 17050-2, or a test report issued by an organisation performing in-house calibration;
- c) ultrasonic instrument and probe are clearly marked to identify the manufacturer, type and series, and carries a unique serial number;
- d) user instruction manual for the particular type and series of the ultrasonic equipment is available;
- e) manufacturer's technical specification for the appropriate type and series of ultrasonic equipment which defines the performance criteria in accordance with this European Standard is available.