BS EN 12668-3:2013

BSI Standards Publication

Non-destructive testing — Characterization and verification of ultrasonic examination equipment

Part 3: Combined equipment

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This British Standard is the UK implementation of EN 12668-3:2013. It supersedes BS EN 12668-3:2000 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee WEE/46, Non-destructive testing.

A list of organizations represented on this committee can be obtained on request to its secretary.

ISBN 978 0 580 81771 7

ICS 19.100

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 30 November 2013.

Amendments issued since publication

Date	Text affected

EUROPEAN STANDARD EN 12668-3

EUROPÄISCHE NORM

November 2013

ICS 19.100

Supersedes EN 12668-3:2000

English Version

Non-destructive testing - Characterization and verification of ultrasonic examination equipment - Part 3: Combined equipment

Essais non destructifs - Caractérisation et vérification de l'appareillage de contrôle par ultrasons - Partie 3: Equipement complet

Zerstörungsfreie Prüfung - Charakterisierung und Verfizierung der Ultraschall-Prüfausrüstung - Teil 3: Komplette Prüfausrüstung

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

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Ref. No. EN 12668-3:2013: E

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Foreword

This document (EN 12668-3:2013) 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of an identical text or by endorsement, at the latest by May 2014, and conflicting national standards shall be withdrawn at the latest by May 2014.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 12668-3:2000.

This European Standard is composed of the following parts:

— 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* (this document).

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1 Scope

This European Standard describes methods and acceptance criteria for verifying the performance of ultrasonic equipment (i.e. instrument and probe combined as defined in EN 12668-1 and EN 12668-2) by the use of appropriate standard calibration blocks. These methods are not intended to prove the suitability of the equipment for particular applications. The methods described are suitable for the use by operators working under site or shop floor conditions. The methods only apply to pulse echo equipment using A-scan presentation, with gain controls or attenuators calibrated in steps not greater than 2 dB and used essentially in contact testing. These methods are specifically intended for manual testing equipment. For automated testing different tests can be needed to ensure satisfactory performance.

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 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 ISO 2400, *Non-destructive testing - Ultrasonic testing - Specification for calibration block No. 1 (ISO 2400)*

EN ISO 7963, *Non-destructive testing - Ultrasonic testing - Specification for calibration block No. 2 (ISO 7963)*

3 Description of tests and reporting

3.1 General

The methods described in this European Standard, together with the frequency of checking, are summarized in Table 1.

Compliance with the checks shall be recorded on the ultrasonic test report.