This is a free page sample. Access the full version online.

National Standards Authority of Ireland

IRISH STANDARD

I.S. EN 12223:2000

ICS 19.100

National Standards
Authority of Ireland
Dublin 9
Ireland

Tel: (01) 807 3800
Tel: (01) 807 3838

NON-DESTRUCTIVE TESTING - ULTRASONIC EXAMINATION - SPECIFICATION FOR CALIBRATION BLOCK NO. 1

This Irish Standard was published under the authority of the National Standards Authority of Ireland and comes into effect on:

April 28, 2000

NO COPYING WITHOUT NSAI PERMISSION EXCEPT AS PERMITTED BY COPYRIGHT LAW

© NSAI 2000

Price Code E

Údarás um Chaighdeáin Náisiúnta na hÉireann

This is a free page sample. Access the full version online.

This is a free page sample. Access the full version online.

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 12223

December 1999

ICS 19.100

English version

Non-destructive testing - Ultrasonic examination - Specification for calibration block No. 1

Essais non destructifs - Contrôle par ultrasons - Spécifications relatives au bloc d'étalonnage n° 1

Zerstörungsfreie Prüfung - Ultraschallprüfung - Beschreibung des Kalibrierkörpers Nr 1

This European Standard was approved by CEN on 29 October 1999.

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, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

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

Central Secretariat: rue de Stassart, 36 B-1050 Brussels

© 1999 CEN All rights of exploitation in any form and by any means reserved worldwide for CEN national Members.

Ref. No. EN 12223:1999 E

This is a free page sample. Access the full version online.

Contents

Page

Foreword **3**

1 Scope **4**

2 Normative references **4**

3 Terms and definitions **4**

4 Manufacture **4**

5 Velocities **5**

6 Marking **5**

7 Certificate **5**

8 Possible modifications to block no. 1 ..... **5**

9 Existing blocks manufactured to other standards or specifications **6**

Annex A (normative) **Measurement of velocities** **10**

This is a free page sample. Access the full version online.

Foreword

This European Standard 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 June 2000, and conflicting national standards shall be withdrawn at the latest by June 2000.

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

This is a free page sample. Access the full version online.

1 Scope

This standard specifies requirements for the dimensions, material and manufacture of a steel block for calibrating ultrasonic flaw detection and inspection equipment used in manual testing. The calibration block dealt with in this standard is identified calibration block No. 1 to distinguish it from other calibration blocks.

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

prEN 1330-4:1999, *Non-destructive testing - Terminology - Part 4 : Terms used in ultrasonic testing.*

EN 10025+A1, *Hot rolled products of non-alloy structural steels - Technical delivery conditions (Includes amendement A1:1993).*

3 Terms and definitions

For this standard the definitions given in prEN 1330-4:1999 apply.

4 Manufacture

4.1 Steel

Blocks shall be manufactured from steel grade S355JO specified in EN 10025 +A1.

4.2 Dimensions

The dimensions of calibration block No. 1 shall be as shown in figure 1.

NOTE This standard does not include any requirement for a plastics insert.

4.3 Machining, heat treatment and surface finish

Blocks shall be rough-machined to a dimension of 320 mm x 120 mm x 30 mm before heat treatment which shall consist of :

— austenitizing at 920 °C for 30 min ;

— rapid cooling (quenching) in water ;

— tempering by heating to 650 °C for 3 h ; and then

— cooling in air.

All external surfaces shall be machined to an R_a value not greater than 0,8 μm. It is permissible to chromium plate or electroless nickel plate the surfaces of the block.

SAI GLOBAL

This is a free preview. Purchase the entire publication at the link below:

Product Page

Looking for additional Standards? Visit Intertek Inform Infostore

Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation