

**Terassepiste mittepurustav
katsetamine. Osa 3: Ferriit- ja
martensiitterasest sepiste katsetamine
ultraheliga**

Non-destructive testing of steel forgings - Part 3:
Ultrasonic testing of ferritic or martensitic steel
forgings

EESTI STANDARDI EESSÖNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 10228-3:1999 sisaldb Euroopa standardi EN 10228-3:1998 ingliskeelset teksti.	This Estonian standard EVS-EN 10228-3:1999 consists of the English text of the European standard EN 10228-3:1998.
Käesolev dokument on jõustatud 23.11.1999 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.	This document is endorsed on 23.11.1999 with the notification being published in the official publication of the Estonian national standardisation organisation.
Standard on kätesaadav Eesti standardiorganisatsioonist.	The standard is available from Estonian standardisation organisation.

Käsitlusala: See EN 10228 standardi osa kirjeldab meetodit, mida kasutatakse ferriit- ja martensiitterastest valmistatud sepiste käsitsi teimisel kajaimpulse-ultrahelimeetodil. Mehaanilisi analüüsimeetodeid nagu sukeldusteimimine võib kasutada, kuid need peavad olema kooskõlastatud tarnija ja ostja vahel. See EN 10228 standardi osa ei kehti järgmiste sepiste kohta: kinnisvormsepised, turbiini rootorite ja generaatorite sepised.	Scope:
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ICS 77.040.20, 77.140.85

Võtmesõnad: ferriitterased, kontrollimine, kvaliteediklassid, martensiitterased, mittepurustavad teimid, pinna kvaliteet, sepised, teimimine ultraheliga, terased, vastuvõetavus

Hinnagrupp K

ICS 77.040.20; 77.140.85

Descriptors: Forgings, steel, non-destructive testing.

English version

Non-destructive testing of steel forgings
Part 3: Ultrasonic testing of ferritic or martensitic steel forgings

Essais non destructifs des pièces
forgées en acier – Partie 3: Contrôle
par ultrasons des pièces forgées en
acières ferritiques et martensitiques

Zerstörungsfreie Prüfung von
Schmiedestücken aus Stahl – Teil 3:
Ultraschallprüfung von Schmiede-
stücken aus ferritischem oder
martensitischem Stahl

This European Standard was approved by CEN on 1997-12-21.

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.

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

CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

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Contents

	Page
Foreword	2
1 Scope	3
2 Normative references	3
3 Definitions	3
4 Items for agreement	4
5 Written procedure	4
6 Personnel qualification	5
7 Equipment and accessories	5
8 Routine calibration and checking	6
9 Stage of manufacture	6
10 Surface condition	7
11 Sensitivity	7
12 Scanning	8
13 Classification	11
14 Recording levels and acceptance criteria	14
15 Sizing	16
16 Reporting	16
Annexes	
A (informative) Maximum testable depth for circumferential shear wave scans	18
B (informative) dB amplitude of indication relative to % DAC	19

Foreword

This European Standard has been prepared by Technical Committee ECISS/TC 28 " Steel forgings", the secretariat of which is held by BSI.

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 November 1998, and conflicting national standards shall be withdrawn at the latest by November 1998.

The titles of the other Parts of this European Standard are:

- Part 1: Magnetic particle inspection
- Part 2: Penetrant testing
- Part 4: Ultrasonic testing of austenitic and austenitic-ferritic stainless steel forgings

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.

1 Scope

This Part of EN 10228 describes the techniques to be used for the manual, pulse-echo, ultrasonic testing of forgings manufactured from ferritic and martensitic steel. Mechanised scanning techniques, such as immersion testing, may be used but should be agreed between the purchaser and supplier. (see clause 4).

This Part of EN 10228 applies to four types of forgings, classified according to their shape and method of production. Types 1, 2 and 3 are essentially simple shapes. Type 4 covers complex shapes.

This Part of EN 10228 does not apply to:

- closed die forgings;
- turbine rotor and generator forgings.

Ultrasonic testing of austenitic and austenitic-ferritic stainless steel forgings is the subject of Part 4 of this European Standard.

2 Normative references

This Part of EN 10228 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 Part of EN 10228 only when incorporated in by amendment or revision. For undated references the latest edition of the publication referred to applies.

EN 473	Qualification and certification of NDT personnel.
prEN 12668	Non-destructive testing - Characterization and verification of ultrasonic examination equipment. Part 1 : Instruments Part 2 : Probes Part 3 : Combined equipment
prEN 583	Ultrasonic examination Part 2 : Sensitivity and range setting. Part 5 : Characteristics and sizing of discontinuities.
prEN 12223	Ultrasonic examination - Calibration blocks
prEN 1330	Non-destructive testing - Terminology. Part 4 : Terms used in ultrasonic testing.

3 Definitions

For the purposes of this Part of EN 10228 the definitions given in prEN 1330-4 apply.