

STN	Nedeštruktívne skúšanie ocel'ových výkovkov. Časť 1: Skúšanie magnetickým práškom.	STN EN 10228-1 01 5039
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Non-destructive testing of steel forgings - Part 1: Magnetic particle inspection

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 11/16

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EUROPEAN STANDARD
NORME EUROPÉENNE
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EN 10228-1

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ICS 77.040.20; 77.140.85

Supersedes EN 10228-1:1999

English Version

**Non-destructive testing of steel forgings - Part 1: Magnetic
particle inspection**

Essais non destructifs des pièces forgées - Partie 1 :
Contrôle par magnétoscopie

Zerstörungsfreie Prüfung von Schmiedestücken aus
Stahl - Teil 1: Magnetpulverprüfung

This European Standard was approved by CEN on 3 October 2015.

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 CEN-CENELEC Management Centre 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 CEN-CENELEC Management Centre has the same status as the official versions.

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



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

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European foreword

This document (EN 10228-1:2016) has been prepared by Technical Committee ECISS/TC 111 “Steel castings and forgings”, 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 December 2016 and conflicting national standards shall be withdrawn at the latest by December 2016.

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 10228-1:1999.

Annex B provides the significant technical changes to the previous version EN 10228-1:1999.

EN 10228 consists of the following parts under the general title *Non-destructive testing of steel forgings*:

- *Part 1: Magnetic particle inspection;*
- *Part 2: Penetrant testing;*
- *Part 3: Ultrasonic testing of ferritic or martensitic steel forgings;*
- *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, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This European Standard describes techniques and acceptance criteria to be used for the magnetic particle testing of forgings manufactured from ferromagnetic materials. The method described is used for the detection of surface discontinuities. It can also detect discontinuities just below the surface but the sensitivity to such discontinuities decreases rapidly with depth.

NOTE A steel forging is considered to be ferromagnetic if the magnetic flux density is greater than 1 T for a tangential magnetic field strength of 2,4 kA/m.

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 ISO 3059, *Non-destructive testing — Penetrant testing and magnetic particle testing — Viewing conditions (ISO 3059)*

EN ISO 9712, *Non-destructive testing — Qualification and certification of NDT personnel (ISO 9712)*

EN ISO 9934-1, *Non-destructive testing — Magnetic particle testing — Part 1: General principles (ISO 9934-1)*

EN ISO 9934-2, *Non-destructive testing — Magnetic particle testing — Part 2: Detection media (ISO 9934-2)*

EN ISO 9934-3, *Non-destructive testing — Magnetic particle testing — Part 3: Equipment (ISO 9934-3)*

koniec náhľadu – text ďalej pokračuje v platenej verzii STN