

**Metallic materials - Charpy pendulum impact test -
Part 1: Test method**

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN ISO 148-1:2010 sisaldab Euroopa standardi EN ISO 148-1:2010 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 30.11.2010 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 27.10.2010.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN ISO 148-1:2010 consists of the English text of the European standard EN ISO 148-1:2010.

This standard is ratified with the order of Estonian Centre for Standardisation dated 30.11.2010 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

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English Version

Metallic materials - Charpy pendulum impact test - Part 1: Test method (ISO 148-1:2009)

Matériaux métalliques - Essai de flexion par choc sur éprouvette Charpy - Partie 1: Méthode d'essai (ISO 148-1:2009)

Metallische Werkstoffe - Kerbschlagbiegeversuch nach Charpy - Teil 1: Prüfverfahren (ISO 148-1:2009)

This European Standard was approved by CEN on 2 October 2010.

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Foreword

The text of ISO 148-1:2009 has been prepared by Technical Committee ISO/TC 164 "Mechanical testing of metals" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 148-1:2010 by Technical Committee ECISS/TC "Test methods for steel (other than chemical analysis)" 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of an identical text or by endorsement, at the latest by April 2011, and conflicting national standards shall be withdrawn at the latest by April 2011.

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Endorsement notice

The text of ISO 148-1:2009 has been approved by CEN as a EN ISO 148-1:2010 without any modification.

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Metallic materials — Charpy pendulum impact test —

Part 1: Test method

1 Scope

This part of ISO 148 specifies the Charpy pendulum impact (V-notch and U-notch) test method for determining the energy absorbed in an impact test of metallic materials.

This part of ISO 148 does not apply to instrumented impact testing, which is specified in ISO 14556.

2 Normative references

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

ISO 148-2:2008, *Metallic materials — Charpy pendulum impact test — Part 2: Verification of testing machines*

ISO 286-1, *Geometrical product specifications (GPS) — ISO code system for tolerances of linear sizes — Part 1: Basis of tolerances, deviations and fits*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1 Energy

3.1.1

initial potential energy

potential energy

K_p

difference between the potential energy of the pendulum hammer prior to its release for the impact test, and the potential energy of the pendulum hammer at the position of impact, as determined by direct verification

[ISO 148-2:2008, definition 3.2.2]

3.1.2

absorbed energy

K

energy required to break a test piece with a pendulum impact testing machine, after correction for friction

NOTE The letter V or U is used to indicate the notch geometry, that is: KV or KU . The number 2 or 8 is used as a subscript to indicate striker radius, for example KV_2 .