

DIN EN ISO 12737

DIN

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Supersedes
DIN EN ISO 12737:2005-10

**Metallic materials –
Determination of plane-strain fracture toughness (ISO 12737:2010)
English translation of DIN EN ISO 12737:2011-04**

Metallische Werkstoffe –
Bestimmung der Bruchzähigkeit (ebener Dehnungszustand) (ISO 12737:2010)
Englische Übersetzung von DIN EN ISO 12737:2011-04

Matériaux métalliques –
Détermination du facteur d'intensité de contrainte critique (ISO 12737:2010)
Traduction anglaise de DIN EN ISO 12737:2011-04

Document comprises 23 pages

Translation by DIN-Sprachendienst.

In case of doubt, the German-language original shall be considered authoritative.

A comma is used as the decimal marker.

National foreword

This standard has been prepared by Technical Committee ISO/TC 164 "Mechanical testing of metals", Subcommittee SC 4 "Toughness testing — Fracture (F), Pendulum (P), Tear (T)" (Secretariat: ANSI, USA) in collaboration with Technical Committee ECISS/TC 101 "Test methods for steel (other than chemical analysis)" (Secretariat: AFNOR, France).

The responsible German body involved in its preparation was the *Normenausschuss Materialprüfung* (Materials Testing Standards Committee), Working Committee NA 062-01-46 AA *Bruchmechanik*.

It should be noted that, in accordance with ISO 12135, the equation " $1 < W/B < 4$ " in Subclause B.1, penultimate line, should read " $1 \leq W/B \leq 4$ ", and the equation " $2 < W/B < 4$ " in Subclause C.1, last line of the first paragraph, should be replaced by " $2 \leq W/B \leq 4$ ".

The DIN Standards corresponding to the International Standards referred to in this document are shown below:

ISO 7500-1	DIN EN ISO 7500-1
ISO 9513	DIN EN ISO 9513
ISO 15653	DIN EN ISO 15653

Amendments

This standard differs from DIN EN ISO 12737:2005-10 as follows:

- a) Clause 10.2 "Residual stresses" has been included;
- b) reference is made to ASTM E399-09;
- c) the standard has been editorially revised.

Previous editions

DIN EN ISO 12737: 1999-04, 2005-10

National Annex NA (informative)

Bibliography

DIN EN ISO 7500-1, *Metallic materials — Verification of static uniaxial testing machines — Part 1: Tension/compression testing machines — Verification and calibration of the force-measuring system*

DIN EN ISO 9513, *Metallic materials — Calibration of extensometer systems used in uniaxial testing*

DIN EN ISO 15653, *Metallic materials — Method of test for the determination of quasistatic fracture toughness of welds*

English Version

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This European Standard was approved by CEN on 4 October 2010.

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