

STN	Jemná keramika (špeciálna keramika, špeciálna technická keramika) Skúšobná metóda na lomovú húževnatosť monolitickéj keramiky pri izbovej teplote metódou šikmého zárezu v trámci (CNB) (ISO 24370: 2005)	STN EN ISO 24370 72 7509
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Fine ceramics (advanced ceramics, advanced technical ceramics) - Test method for fracture toughness of monolithic ceramics at room temperature by chevron-notched beam (CNB) method (ISO 24370:2005)

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. 05/23

Obsahuje: EN ISO 24370:2023, ISO 24370:2005

Oznámením tejto normy sa ruší
STN EN 14425-3 (72 7509) z októbra 2010

136896

EUROPEAN STANDARD

EN ISO 24370

NORME EUROPÉENNE

EUROPÄISCHE NORM

March 2023

ICS 81.060.30

Supersedes EN 14425-3:2010

English Version

Fine ceramics (advanced ceramics, advanced technical ceramics) - Test method for fracture toughness of monolithic ceramics at room temperature by chevron-notched beam (CNB) method (ISO 24370:2005)

Céramiques techniques - Méthode d'essai de ténacité à la rupture des céramiques monolithiques à température ambiante sur éprouvette entaillée en chevron (ISO 24370:2005)

Hochleistungskeramik - Prüfverfahren zur Bestimmung der Bruchzähigkeit monolithischer Keramik an Biegeproben mit Chevron-Kerb (CNB-Verfahren) (ISO 24370:2005)

This European Standard was approved by CEN on 10 March 2023.

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EN ISO 24370:2023 (E)

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European foreword

The text of ISO 24370:2005 has been prepared by Technical Committee ISO/TC 206 "Fine ceramics" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 24370:2023 by Technical Committee CEN/TC 184 "Advanced technical ceramics" the secretariat of which is held by DIN.

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The text of ISO 24370:2005 has been approved by CEN as EN ISO 24370:2023 without any modification.

INTERNATIONAL STANDARD

ISO 24370

First edition
2005-06-01

Fine ceramics (advanced ceramics, advanced technical ceramics) — Test method for fracture toughness of monolithic ceramics at room temperature by chevron-notched beam (CNB) method

*Céramiques techniques — Méthode d'essai de ténacité à la rupture des
céramiques monolithiques à température ambiante sur éprouvette
entaillée en chevron*



Reference number
ISO 24370:2005(E)

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Published in Switzerland

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ISO 24370:2005(E)**Foreword**

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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ISO 24370 was prepared by Technical Committee ISO/TC 206, *Fine ceramics*.

Fine ceramics (advanced ceramics, advanced technical ceramics) — Test method for fracture toughness of monolithic ceramics at room temperature by chevron-notched beam (CNB) method

1 Scope

This International Standard specifies a test method for determining the fracture toughness of monolithic ceramic materials at room temperature by the chevron-notched beam (CNB) method.

This International Standard is applicable to monolithic ceramics and whisker- or particulate-reinforced ceramics that are regarded as macroscopically homogeneous. It is not applicable to continuous-fibre reinforced ceramic composites.

This International Standard is usually applicable to ceramic materials with a fracture toughness less than about 12 MPa(m^{1/2}). The test method is applicable to materials with a flat crack-growth resistance curve and may be applicable to materials with a rising crack-growth resistance curve (R-curve).

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 7500-1:2004, *Metallic materials — Verification of static uniaxial testing machines — Part 1: Tension/compression testing machines — Verification and calibration of the force-measuring system*

ISO 14704:2000, *Fine ceramics (advanced ceramics, advanced technical ceramics) — Test method for flexural strength of monolithic ceramics at room temperature*

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