ICS 81.060.30 SLOVENSKÁ TECHNICKÁ NORMA Október 2016

STN	**Jemná keramika (špeciálna keramika, špeciálna technická keramika). Stanovenie priľnavosti keramických povlakov skúškou vrypom (ISO 20502: 2005 vrátane Opravy 1: 2009).**	**STN EN ISO 20502** 72 7547

Fine ceramics (advanced ceramics, advanced technical ceramics) - Determination of adhesion of ceramic coatings by scratch testing (ISO 20502:2005 including Cor 1:2009)

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. 09/16

Obsahuje: EN ISO 20502:2016, ISO 20502:2005

Oznámením tejto normy sa ruší
STN EN 1071-3 (72 7516) z februára 2006

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN ISO 20502

April 2016

ICS 81.060.30

Supersedes EN 1071-3:2005

English Version

Fine ceramics (advanced ceramics, advanced technical ceramics) - Determination of adhesion of ceramic coatings by scratch testing (ISO 20502:2005 including Cor 1:2009)

Céramiques techniques - Détermination de l'adhérence des revêtements céramiques par essai de rayure (ISO 20502:2005, y compris Cor 1:2009)

Hochleistungskeramik - Bestimmung der Haftung von keramischen Schichten mit dem Ritztest (ISO 20502:2005 einschließlich Cor 1:2009)

This European Standard was approved by CEN on 18 March 2016.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
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European foreword

The text of ISO 20502:2005 including Cor 1:2009, 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 20502:2016 by Technical Committee CEN/TC 184 “Advanced technical ceramics” the secretariat of which is held by DIN.

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of an identical text or by endorsement, at the latest by October 2016, and conflicting national standards shall be withdrawn at the latest by October 2016.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.

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Endorsement notice

The text of ISO 20502:2005 including Cor 1:2009, has been approved by CEN as EN ISO 20502:2016 without any modification.

INTERNATIONAL STANDARD

ISO 20502

First edition
2005-08-15

Fine ceramics (advanced ceramics, advanced technical ceramics) — Determination of adhesion of ceramic coatings by scratch testing

Céramiques techniques — Détermination de l'adhérence des revêtements céramiques par essai de rayure

Reference number
ISO 20502:2005(E)

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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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ISO 20502 was prepared by Technical Committee ISO/TC 206, *Fine ceramics*.

INTERNATIONAL STANDARD **ISO 20502:2005(E)**

Fine ceramics (advanced ceramics, advanced technical ceramics) — Determination of adhesion of ceramic coatings by scratch testing

1 Scope

This International Standard describes a method of testing ceramic coatings by scratching with a diamond stylus. During a test, either a constant or increasing force normal to the surface under test is applied to the stylus so as to promote adhesive and/or cohesive failure of the coating-substrate system. The test method is suitable for evaluating ceramic coatings up to a thickness of 20 μm and might also be suitable for evaluating other coating types and thicknesses.

The International Standard is intended for use in the macro (1 to 100 N) force range. The procedures may also be applicable to other force ranges. However, appropriate calibration is essential if the normal forces at which failure occurs are to be quantified.

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 4288, *Geometric Product Specifications (GPS) — Surface texture: Profile method — Rules and procedures for the assessment of surface texture*

ISO 6508-2, *Metallic materials — Rockwell hardness test — Part 2: Verification and calibration of testing machines (scales A, B, C, D, E, F, G, H, K, N, T)*

ISO/IEC 17025, *General requirements for the competence of testing and calibration laboratories*