

Paints and varnishes - T-bend test

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 17132:2007 sisaldab Euroopa standardi EN ISO 17132:2007 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 22.11.2007 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN ISO 17132:2007 consists of the English text of the European standard EN ISO 17132:2007.</p> <p>This document is endorsed on 22.11.2007 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala: This International Standard describes a method of evaluating the flexibility and adhesion of an organic coating on a metallic substrate by observing the cracking or loss of adhesion when a coated test panel is bent. The method can be used to confirm whether paints, varnishes or related products meet a given test requirement in a pass/fail test, or to determine the minimum bending diameter at which cracking does not occur.</p>	<p>Scope: This International Standard describes a method of evaluating the flexibility and adhesion of an organic coating on a metallic substrate by observing the cracking or loss of adhesion when a coated test panel is bent. The method can be used to confirm whether paints, varnishes or related products meet a given test requirement in a pass/fail test, or to determine the minimum bending diameter at which cracking does not occur.</p>
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ICS 87.040

Võtmesõnad:

ICS 87.040

English Version

Paints and varnishes - T-bend test (ISO 17132:2007)

Peintures et vernis - Essai de pliage en T (ISO
17132:2007)

Beschichtungsstoffe - T-Biegeprüfung (ISO 17132:2007)

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Foreword

This document (EN ISO 17132:2007) has been prepared by Technical Committee ISO/TC 35 "Paints and varnishes" in collaboration with Technical Committee CEN/TC 139 "Paints and varnishes", 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 April 2008, and conflicting national standards shall be withdrawn at the latest by April 2008.

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Endorsement notice

The text of ISO 17132:2007 has been approved by CEN as a EN ISO 17132:2007 without any modification.

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Paints and varnishes — T-bend test

Peintures et vernis — Essai de pliage en T



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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.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 17132 was prepared by Technical Committee ISO/TC 35, *Paints and varnishes*, Subcommittee SC 9, *General test methods for paints and varnishes*.

Introduction

This International Standard is one of five standards which specify empirical test procedures for assessing the resistance of coatings of paints, varnishes and related products to cracking and/or detachment from the substrate under different conditions of deformation. The other International Standards are ISO 1519, ISO 1520, ISO 6272 and ISO 6860.

The T-bend test has already been standardized in the USA (ASTM D 4145), Europe (EN 13523-7) and Japan (JIS G 3312). The test methods in these standards are basically the same, but differ from each other in details such as

- whether the coated test panel is folded back on itself or is bent round a mandrel or a test panel used as a spacer;
- the way in which the test result is expressed.

In this International Standard, the basic contents common to the US, European and Japanese standards have been adopted, but details in which the US, European and Japanese standards differ, in particular the use of a mandrel or spacer panels, have been made subject to agreement between the interested parties.

Paints and varnishes — T-bend test

1 Scope

This International Standard describes a method of evaluating the flexibility and adhesion of an organic coating on a metallic substrate by observing the cracking or loss of adhesion when a coated test panel is bent.

The method can be used to confirm whether paints, varnishes or related products meet a given test requirement in a pass/fail test, or to determine the minimum bending diameter at which cracking does not occur.

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 1513, *Paints and varnishes — Examination and preparation of samples for testing*

ISO 1514, *Paints and varnishes — Standard panels for testing*

ISO 2808, *Paints and varnishes — Determination of film thickness*

ISO 15528, *Paints, varnishes and raw materials for paints and varnishes — Sampling*

IEC 60454-2, *Specification for pressure-sensitive adhesive tapes for electrical purposes — Part 2: Methods of test*

3 Terms and definitions

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

3.1

T-bend test

test designed to determine the flexibility of a paint coating by bending a coated test panel through 180°

3.2

T-bend rating

minimum number of spacers of defined thickness around which a coated test panel can be bent (or, if bent around a mandrel, the number of spacers equivalent to the diameter of the mandrel) without cracking or loss of adhesion (flaking) of the coating occurring

4 Principle

Coated panels are bent back on themselves to 180°, with the coated surface on the outside of the bend, at progressively less severe radii of curvature, the radii of curvature being defined by spacers or mandrels. After bending, each panel is examined with a magnifying glass for cracking of the coating and by a tape pull-off test