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**Paints and varnishes — Rapid-deformation  
(impact resistance) tests —**

Part 2:  
**Falling-weight test, small-area indenter**

*Peintures et vernis — Essais de déformation rapide (résistance au choc) —  
Partie 2: Essai de chute d'une masse avec pénétrateur de surface réduite*



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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 3.

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 part of ISO 6272 may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

International Standard ISO 6272-2 was prepared by Technical Committee ISO/TC 35, *Paints and varnishes*, Subcommittee SC 9, *General test methods for paints and varnishes*.

Together with ISO 6272-1, this part of ISO 6272 cancels and replaces ISO 6272:1993. The main change is the introduction of the option to increase the mass of the weight that is dropped onto the panel, thus enabling a more severe test to be carried out.

ISO 6272 consists of the following parts, under the general title *Paints and varnishes — Rapid-deformation (impact resistance) tests*:

- Part 1: *Falling-weight test, large-area indenter*
- Part 2: *Falling-weight test, small-area indenter*

Annex A forms a normative part of this part of ISO 6272.

# Paints and varnishes — Rapid-deformation (impact resistance) tests —

Part 2:

## Falling-weight test, small-area indenter

**WARNING** — This part of ISO 6272 does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user of this part of ISO 6272 to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

### 1 Scope

This part of ISO 6272 describes a method for rapidly deforming, by impact with a spherical indenter of diameter 12,7 mm or 15,9 mm, a coating film and its substrate and evaluating the effect of such deformation.

**NOTE** The term “impact resistance” is included in the title and text of this part of ISO 6272, but one important characteristic of the apparatus used is that it should produce rapid deformation rather than a true impact.

This test method should be restricted to testing in only one laboratory when numerical values are used because of the poor reproducibility of the method. Interlaboratory agreement is improved when ranking is used in place of numerical values.

### 2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of ISO 6272. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of ISO 6272 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

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*

### 3 Term and definition

For the purposes of this part of ISO 6272, the following term and definition apply.

#### 3.1

##### **impact resistance of a coating**

number of kilogram metres (inch pounds) required to produce cracking in a deformed coating