# INTERNATIONAL STANDARD



Second edition 2003-09-01

## Paints and varnishes — Evaluation of degradation of coatings — Designation of quantity and size of defects, and of intensity of uniform changes in appearance —

## Part 4: Assessment of degree of cracking

Peintures et vernis — Évaluation de la dégradation des revêtements — Désignation de la quantité et de la dimension des défauts, et de l'intensité des changements uniformes d'aspect —

Partie 4: Évaluation du degré de craquelage



Reference number ISO 4628-4:2003(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 traison 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 orafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical convertues 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 applying by at least 75 % of the member bodies casting a vote.

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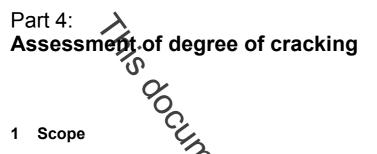
ISO 4628-4 was prepared by Technical Committee ISO/TC 35, Paints and varnishes, Subcommittee SC 9, General test methods for paints and varnishes.

This second edition cancels and replaces the first edition (ISO 4628-4:1982), of which it constitutes a mainly editorial revision. Examples of different types of cracking have been added as an informative annex.

 $\mathbf{O}$ ISO 4628 consists of the following parts, under the general title Paints and varnishes - Evaluation of degradation of coatings — Designation of quantity and size of defects, and of intensity of uniform changes in appearance: Joenerated by FLS

- Part 1: General introduction and designation system
- Part 2: Assessment of degree of blistering
- Part 3: Assessment of degree of rusting
- Part 4: Assessment of degree of cracking
- Part 5: Assessment of degree of flaking
- Part 6: Assessment of degree of chalking by tape method
- Part 7: Assessment of degree of chalking by velvet method
- Part 8: Assessment of degree of delamination and corrosion around a scribe
- Part 10: Assessment of degree of filiform corrosion

## Paints and varnishes — Evaluation of degradation of coatings — Designation of quantity and size of defects, and of intensity of uniform changes in appearance —



This part of ISO 4628 describes method for assessing the degree of cracking of coatings by comparison with pictorial standards, using the designation system defined in ISO 4628-1.

ISO 4628-1 defines the system used for designating the quantity and size of defects and the intensity of changes in appearance of coatings an Outlines the general principles of the system. This system is intended to be used, in particular, for defects caused by ageing and weathering, and for uniform changes such as colour changes, for example yellowing.

#### 2 Normative references

The following referenced documents are indispensive 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 4628-1, Paints and varnishes — Evaluation of degradation of coatings — Designation of quantity and size of defects, and of intensity of uniform changes in appearance Part 1: General introduction and designation system A. C.

3 Terms and definitions For the purposes of this document, the following terms and definitions apply (1)

### degree of cracking

rating characterizing cracks in a coating in terms of quantity, size and depth

#### 4 Assessment

Assess the quantity of cracking by reference to Table 1 and using as an example Figure 1 or 2, depending on the type of cracking.

Figure 1 shows cracking without preferential direction and Figure 2 shows cracking in one preferential NOTE direction, which occurs with substrates such as wood ("anisotropic" substrates). Other forms of cracking occur, but the principles of assessing the quantity remain the same.