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

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 DI TTY EESTI STANDARDI EESSÕNA NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN ISO 4628 1:2004 sisaldab Euroopa standardi EN ISO 4628-1:2003 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 4628-1:2004 consists of the English text of the European standard EN ISO 4628-1:2003.
Käesolev dokument on jõustatud 23.11.2004 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.	This document is endorsed on 23.11.2004 with the notification being published in the official publication of the Estonian national standardisation organisation.
Standard on kättesaadav Eesti standardiorganisatsioonist.	The standard is available from Estonian standardisation organisation.
Käsitlusala: This part of ISO 4628 defines a system for designating the quantity and size of defects and the intensity of changes in appearance of coatings and outlines the general principles of the system used throughout ISO 4628. 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.	Scope: This part of ISO 4628 defines a system for designating the quantity and size of defects and the intensity of changes in appearance of coatings and outlines the general principles of the system used throughout ISO 4628. 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.
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# EN ISO 4628-1

September 2003

## EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

**English version** 

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 (ISO 4628-1:2003)

Peintures et vernis - Évaluation de la dégradation des revêtements - Désignation de la quantité et de la dimension des défauts, et de l'intensité des chan-gements uniformes d'aspect - Partie 1: Introduction générale et système de désignation (ISO 4628- 2003)

Beschichtungsstoffe - Beurteilung von Beschichtungsschäden - Bewertung der Menge und Größe von Schäden und der Intensität von gleichmä-Bigen Veränderungen im Aussehen -Teil 1: Allgemeine Einführung und Bewertungssystem (ISO 4628-1 : 2003)



This European Standard was approved by CEN on 2003-08-01.

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Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Management Centre or to any CEN member.

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European Committee for Standardization Comité Européen de Normalisation Europäisches Komitee für Normung

Management Centre: rue de Stassart 36, B-1050 Brussels

#### Foreword

International Standard

ISO 4628-1: 2003 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,

which was prepared by ISO/TC 35 'Paints and varnishes' of the International Organization for Standardization, has been adopted by Technical Committee CEN/TC 139 'Paints and varnishes', the Secretariat of which is held by DIN, as a European Standard.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, and conflicting national standards withdrawn, by March 2004 at the latest.

In accordance with the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard:

Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, the Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland, and the United Kingdom.

Inter Kingdom.

Endorsement notice
The text of the International Standard VISO 4628-1 : 2003 was approved by CEN as a European Standard without any modification.

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#### 1 Scope

This part of ISO 4628 defines a system for designating the quantity and size of defects and the intensity of changes in appearance of coatings and outlines the general principles of the system used throughout ISO 4628. 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.

The other parts of ISO 4628 provide pictorial standards or other means of evaluating particular types of defect. As far as possible, already existing evaluation schemes have been used as the basis.

This part of ISO 4628 can also be used for assessing defects not covered by the other parts of ISO 4628.

### 2 General principles of the designation system

A uniform convention has been adopted for designating the quantity and size of defects and the intensity of changes by means of ratings on a numerical scale ranging from 0 to 5, 0 denoting no defects or changes, and 5 denoting defects or changes so severe that further discrimination is not reasonable. The other ratings, corresponding to the numbers 1, 2, 3 and 4, are so defined that they give optimum discrimination over the whole range of the scale.

The use of intermediate half-steps is permissible, if specified, to give a more detailed report on the defects or changes observed.

NOTE 1 The quantity of small defects scattered over the test area may be assessed by means of a grid method. Details of such a method are described in ISO 4540, *Metallic coatings* — *Coatings cathodic to the substrate* — *Rating of electroplated test specimens subjected to corrosion tests.* 

NOTE 2 The ISO ranking may be different from the ranking schemes used in other standards, e.g. the rusting evaluation ASTM D 610, *Standard Test Method for Evaluating Degree of Rusting on Painted Steel Surfaces*, where ranking is from 10 to 1, with 10 meaning no change and 1 meaning greatest change.

In addition to the ratings, the approximate dimensions of the area concerned shall be given, or the proportion of the area concerned compared with the total area, expressed as a percentage.

### 3 Assessment of defects and of intensity of changes

#### 3.1 General

Carry out the assessment under good illumination.