

**Paints and varnishes - Evaluation of degradation of coatings - Designation of quantity and size of defects, and of intensity of uniform changes in appearance - Part 8: Assessment of degree of delamination and corrosion around a scribe or other artificial defect (ISO 4628-8:2012)**

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 4628-8:2012 sisaldab Euroopa standardi EN ISO 4628-8:2012 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 4628-8:2012 consists of the English text of the European standard EN ISO 4628-8:2012.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
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Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

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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 8: Assessment of degree  
of delamination and corrosion around a scribe or other artificial  
defect (ISO 4628-8:2012)

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 8: Évaluation du degré de décollement et  
de corrosion autour d'une rayure ou d'un autre défaut  
artificiel (ISO 4628-8:2012)

Beschichtungsstoffe - Beurteilung von  
Beschichtungsschäden - Beurteilung der Menge und der  
Größe von Schäden und der Intensität von gleichmäßigen  
Veränderungen im Aussehen - Teil 8: Bewertung der von  
einem Ritz oder einer anderen künstlichen Verletzung  
ausgehenden Enthftung und Korrosion (ISO 4628-8:2012)

This European Standard was approved by CEN on 5 October 2012.

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EUROPÄISCHES KOMITEE FÜR NORMUNG

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## Foreword

This document (EN ISO 4628-8:2012) 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 May 2013, and conflicting national standards shall be withdrawn at the latest by May 2013.

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.

This document supersedes EN ISO 4628-8:2005.

According to the CEN/CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

### Endorsement notice

The text of ISO 4628-8:2012 has been approved by CEN as a EN ISO 4628-8:2012 without any modification.

## Introduction

ISO 4628-1<sup>[1]</sup> defines a system for designating the quantity and size of defects and the intensity of uniform changes in appearance of coatings and 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.

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

After exposure of a coated test panel with a scribe or other artificial defect in a corrosive environment, one, or a combination of both of, the following phenomena can occur around the scribe or other artificial defect:

- delamination;
- corrosion.

Delamination and corrosion around the scribe or other artificial defect are evaluated separately to provide more detailed information about the performance of a coating system in corrosive environments.

In addition to the procedure specified in this part of ISO 4628, assessments of delamination and corrosion around the scribe or other artificial defect may be carried out using optical image processing.

Rating of other defects is described in other parts of ISO 4628.

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

## Part 8: Assessment of degree of delamination and corrosion around a scribe or other artificial defect

### 1 Scope

This part of ISO 4628 specifies a method for assessing delamination and corrosion around a scribe or other artificial defect on a coated panel or other coated test specimen, caused by a corrosive environment.

This part of ISO 4628 does not cover evaluation of pitting corrosion or pit depth.

NOTE 1 Examples of corrosive environments are artificial atmospheres such as salt spray, as used in the test method specified in ISO 9227,<sup>[7]</sup> and sea water immersion as used in the test method specified in ISO 15711.<sup>[8]</sup> Natural environments can also be used.

NOTE 2 The extent of other defects can also be determined at the same time as delamination and corrosion. Methods are given as follows:

- blistering in accordance with ISO 4628-2;<sup>[2]</sup>
- rusting in accordance with ISO 4628-3;<sup>[3]</sup>
- cracking in accordance with ISO 4628-4;<sup>[4]</sup>
- flaking in accordance with ISO 4628-5;<sup>[5]</sup>
- filiform corrosion in accordance with ISO 4628-10.<sup>[6]</sup>

### 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 3270, *Paints and varnishes and their raw materials — Temperatures and humidities for conditioning and testing*

### 3 Terms and definitions

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

#### 3.1

##### holiday

absence of a paint film from certain areas of a coated substrate

#### 3.2

##### artificial defect

holiday through a coating, deliberately introduced in order to expose the underlying metal substrate prior to exposure to a corrosive environment