STN	Príprava oceľových podkladov pred aplikáciou náterových látok a podobných výrobkov Skúšky na posudzovanie čistoty povrchu Časť 3: Stanovenie prachu na oceľovom povrchu pripravenom na natieranie (metóda snímania	STN EN ISO 8502-3
	samolepiacou páskou) (ISO 8502-3: 2017)	03 8224

Preparation of steel substrates before application of paints and related products - Tests for the assessment of surface cleanliness - Part 3: Assessment of dust on steel surfaces prepared for painting (pressure-sensitive tape method) (ISO 8502-3:2017)

Táto norma obsahuje anglickú verziu európskej normy. This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 06/17

Obsahuje: EN ISO 8502-3:2017, ISO 8502-3:2017

Oznámením tejto normy sa ruší STN EN ISO 8502-3 (03 8224) z decembra 2001

125005

Úrad pre normalizáciu, metrológiu a skúšobníctvo Slovenskej republiky, 2017

Podľa zákona č. 264/1999 Z. z. o technických požiadavkách na výrobky a o posudzovaní zhody a o zmene a doplnení niektorých zákonov v znení neskorších predpisov sa slovenská technická norma a časti slovenskej technickej normy môžu rozmnožovať alebo rozširovať len so súhlasom slovenského národného normalizačného orgánu.

STN EN ISO 8502-3: 2017

EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN ISO 8502-3

February 2017

ICS 25.220.10

Supersedes EN ISO 8502-3:1999

English Version

Preparation of steel substrates before application of paints and related products - Tests for the assessment of surface cleanliness - Part 3: Assessment of dust on steel surfaces prepared for painting (pressure-sensitive tape method) (ISO 8502-3:2017)

Préparation des subjectiles d'acier avant application de peintures et de produits assimilés - Essais pour apprécier la propreté d'une surface - Partie 3: Évaluation de la poussière sur les surfaces d'acier préparées pour la mise en peinture (méthode du ruban adhésif sensible à la pression) (ISO 8502-3:2017) Vorbereitung von Stahloberflächen vor dem Auftragen von Beschichtungsstoffen - Prüfungen zum Beurteilen der Oberflächenreinheit - Teil 3: Beurteilung von Staub auf für das Beschichten vorbereiteten Stahloberflächen (Klebeband-Verfahren) (ISO 8502-3:2017)

This European Standard was approved by CEN on 30 September 2016.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of 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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

© 2017 CEN All rights of exploitation in any form and by any means reserved worldwide for CEN national Members.

Ref. No. EN ISO 8502-3:2017 E

Contents	Page
European foreword	

European foreword

This document (EN ISO 8502-3:2017) 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 August 2017, and conflicting national standards shall be withdrawn at the latest by August 2017.

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 8502-3:1999.

According to the CEN-CENELEC Internal Regulations, the national standards organizations 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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 8502-3:2017 has been approved by CEN as EN ISO 8502-3:2017 without any modification.

STN EN ISO 8502-3: 2017 INTERNATIONAL STANDARD

Second edition 2017-01

Preparation of steel substrates before application of paints and related products — Tests for the assessment of surface cleanliness —

Part 3:

Assessment of dust on steel surfaces prepared for painting (pressuresensitive tape method)

Préparation des subjectiles d'acier avant application de peintures et de produits assimilés — Essais pour apprécier la propreté d'une surface —

Partie 3: Évaluation de la poussière sur les surfaces d'acier préparées pour la mise en peinture (méthode du ruban adhésif sensible à la pression)



Reference number ISO 8502-3:2017(E)



© ISO 2017, Published in Switzerland

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office Ch. de Blandonnet 8 • CP 401 CH-1214 Vernier, Geneva, Switzerland Tel. +41 22 749 01 11 Fax +41 22 749 09 47 copyright@iso.org www.iso.org

Page

Contents

Forev	wordiv
Intro	ductionv
1	Scope 1
2	Normative references 1
3	Terms and definitions1
4	Principle1
5	Apparatus and materials2
6	Procedure2
7	Test report
Anne	ex A (informative) Spring-loaded roller 5
Bibli	ography

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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: <u>www.iso.org/iso/foreword.html</u>.

This document was developed by Technical Committee ISO/TC 35, *Paints and varnishes*, Subcommittee SC 12, *Preparation of steel substrates before application of paints and related products*.

This second edition cancels and replaces the first edition (ISO 8502-3:1992), which has been technically revised with the following changes:

- a) in <u>Clause 2</u> and <u>5.1</u>, IEC 454-2 has been substituted with IEC 60454-2;
- b) in <u>Table 1</u>, decimal sign has been changed to a decimal comma;
- c) Figure A.4 has been added and the former Figure A.4 has been renamed Figure A.5;
- d) the document has been editorially revised.

ISO 8502 consists of the following parts, under the general title *Preparation of steel substrates before application of paints and related products* — *Tests for the assessment of surface cleanliness:*

- Part 2: Laboratory determination of chloride on cleaned surfaces
- Part 3: Assessment of dust on steel surfaces prepared for painting (pressure-sensitive tape method)
- Part 4: Guidance on the estimation of the probability of condensation prior to paint application
- Part 5: Measurement of chloride on steel surfaces prepared for painting (ion detection tube method)
- Part 6: Extraction of soluble contaminants for analysis The Bresle method
- Part 9: Field method for the conductometric determination of water-soluble salts
- Part 11: Field method for the turbidimetric determination of water-soluble sulfate
- Part 12: Field method for the titrimetric determination of water-soluble ferrous ions

Introduction

The performance of protective coatings of paint and related products applied to steel is significantly affected by the state of the steel surface immediately prior to painting. The principal factors that are known to influence this performance are as follows:

- a) presence of rust and mill scale;
- b) presence of surface contaminants, including salts, dust, oils and greases;
- c) surface profile.

The ISO 8501, ISO 8502 and ISO 8503 series of International Standards have been prepared to provide methods of assessing these factors, while the ISO 8504 series provides guidance on the preparation methods that are available for cleaning steel substrates, indicating the capabilities of each in attaining specified levels of cleanliness.

These series of International Standards do not contain recommendations for the protective coating systems to be applied to the steel surface. Neither do they contain recommendations for the surface quality requirements for specific situations even though surface quality can have a direct influence on the choice of protective coating to be applied and on its performance. Such recommendations are found in other documents such as national standards and codes of practice. It will be necessary for the users of these International Standards to ensure that the qualities specified are

- compatible and appropriate both for the environmental conditions to which the steel will be exposed and for the protective coating system to be used, and
- within the capability of the cleaning procedure specified.

The four series of International Standards referred to above deal with the following aspects of preparation of steel substrates before application of paints and related products:

- ISO 8501 on visual assessment of surface cleanliness;
- ISO 8502 on tests for the assessment of surface cleanliness;
- ISO 8503 on surface roughness characteristics of blast-cleaned steel substrates;
- ISO 8504 on surface preparation methods.

Each of these International Standards is in turn divided into separate parts.

This part of ISO 8502 describes a procedure for the assessment, using a pressure-sensitive tape method, of the quantity and the particle size of dust on steel surfaces prepared for painting.

In the painting schedule requirements of contractual documents giving details of surface preparation by blast-cleaning, it is normally specified that all surfaces shall be free from surface contamination including oil, grease, dirt, dust and water-soluble salts.

Dust on blast-cleaned steel surfaces can reduce the adhesion of subsequently applied organic coatings and, by absorbing moisture, might promote the corrosion of the blast-cleaned steel surfaces. Accumulation of dust more naturally occurs on horizontal surfaces, the interior of pipes, and in structural cavities. Special inspection should be carried out to ensure that such areas are adequately cleaned and adequately free from dust before painting.

Because of subjective factors involved in the test procedure, the test does not allow the precise determination of dust retained on blast cleaned steel surfaces. Nevertheless, when carried out by experienced operators and especially when used to compare the performance of surfaces under test with agreed standard specimens, it gives very useful information.

There are many possible variables in the conditions at sites where tests might be required to be carried out. Agreements made between interested parties, where appropriate, should include the number or frequency of tests, the test locations, and the dates and times when the tests are to be carried out.

Preparation of steel substrates before application of paints and related products — Tests for the assessment of surface cleanliness —

Part 3: Assessment of dust on steel surfaces prepared for painting (pressure-sensitive tape method)

1 Scope

This part of ISO 8502 describes a method for the assessment of dust remaining on cleaned steel surfaces prepared for painting. It provides pictorial ratings for the assessment of the average quantity of dust. It also provides descriptive classes for the assessment of the average size of the dust particles.

The method described is a qualitative test useful for a steel surface, before cleaning, corresponding to rust grade A, B or C as defined in ISO 8501-1. It can be used as a "pass/fail" test or to provide a permanent record of the dust present on a surface.

NOTE The quantity ratings and size classes referred to in this part of ISO 8502 are derived from ISO 4628-1.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 4618, Paints and varnishes — Terms and definitions

ISO 8501-1, Preparation of steel substrates before application of paints and related products — Visual assessment of surface cleanliness — Part 1: Rust grades and preparation grades of uncoated steel substrates and of steel substrates after overall removal of previous coatings

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

koniec náhľadu – text ďalej pokračuje v platenej verzii STN