

SLOVENSKI STANDARD

SIST EN ISO 8503-5:2017

01-maj-2017

Nadomešča:

SIST EN ISO 8503-5:2005

Priprava jeklenih podlag pred nanašanjem barv in sorodnih premazov - Značilnosti hrapavosti peskanih jeklenih podlag - 5. del: Metoda z odtisnim trakom za ugotavljanje profila površine (ISO 8503-5:2017)

Preparation of steel substrates before application of paints and related products - Surface roughness characteristics of blast-cleaned steel substrates - Part 5: Replica tape method for the determination of the surface profile (ISO 8503-5:2017)

Vorbereitung von Stahloberflächen vor dem Auftragen von Beschichtungsstoffen - Rauheitskenngrößen von gestrahlten Stahloberflächen - Teil 5: Abdruckverfahren zum Bestimmen der Rauheit (ISO 8503-5:2017)

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Préparation des subjectiles d'acier avant application de peintures et de produits assimilés - Caractéristiques de rugosité des subjectiles d'acier décapés - Partie 5: Méthode de l'empreinte sur ruban adhésif pour la détermination du profil de surface (ISO 8503-5:2017)

Ta slovenski standard je istoveten z: EN ISO 8503-5:2017

ICS:

25.220.10	Priprava površine	Surface preparation
87.020	Postopki za nanašanje barvnih premazov	Paint coating processes

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en,fr,de

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EUROPEAN STANDARD

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NORME EUROPÉENNE

EUROPÄISCHE NORM

March 2017

ICS 25.220.10

Supersedes EN ISO 8503-5:2004

English Version

Preparation of steel substrates before application of paints
and related products - Surface roughness characteristics of
blast-cleaned steel substrates - Part 5: Replica tape
method for the determination of the surface profile (ISO
8503-5:2017)

Préparation des subjectiles d'acier avant application de
peintures et de produits assimilés - Caractéristiques de
rugosité des subjectiles d'acier décapés - Partie 5:
Méthode de l'empreinte sur ruban adhésif pour la
détermination du profil de surface (ISO 8503-5:2017)

Vorbereitung von Stahloberflächen vor dem Auftragen
von Beschichtungstoffen - Rauheitskenngrößen von
gestrahlten Stahloberflächen - Teil 5:
Abdruckverfahren zum Bestimmen der Rauheit (ISO
8503-5:2017)

This European Standard was approved by CEN on 3 February 2017.

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

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European foreword

This document (EN ISO 8503-5:2017) 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 September 2017, and conflicting national standards shall be withdrawn at the latest by September 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 8503-5:2004.

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.

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Endorsement notice

The text of ISO 8503-5:2017 has been approved by CEN as EN ISO 8503-5:2017 without any modification.

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INTERNATIONAL
STANDARDISO
8503-5Second edition
2017-03

**Preparation of steel substrates before
application of paints and related
products — Surface roughness
characteristics of blast-cleaned steel
substrates —**

Part 5:

**Replica tape method for the
determination of the surface profile**

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Préparation des subjectiles d'acier avant application de peintures et de produits assimilés — Caractéristiques de rugosité des subjectiles d'acier décapés —

Partie 5: Méthode de l'empreinte sur ruban adhésif pour la détermination du profil de surface

Reference number
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ISO 8503-5:2017(E)

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).

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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: www.iso.org/iso/foreword.html.

This document was prepared 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 8503-5:2003), which has been technically revised.

A list of all parts in the ISO 8503 series can be found on the ISO website.

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:

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

ISO 8501 (all parts), ISO 8502 (all parts) and ISO 8503 (all parts) have been prepared to provide methods of assessing these factors, while ISO 8504 (all parts) 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 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 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;
- within the capability of the cleaning procedure specified.

The International Standards referred to above deal with the following aspects of preparation of steel substrates:

- ISO 8501 — *Visual assessment of surface cleanliness*;
- ISO 8502 — *Tests for the assessment of surface cleanliness*;
- ISO 8503 — *Surface roughness characteristics of blast-cleaned steel substrates*;
- ISO 8504 — *Surface preparation methods*.

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

It is important to note that numerical characterization of a surface profile is meaningful only when accompanied by an understanding of the errors of measurement and by the realization that different techniques may yield somewhat different numerical values for the profile. Estimates of measurement error associated with different techniques can be obtained from national or international standards or from the equipment manufacturers. As shown in [Annex B](#), values given by the replica tape method align well with those obtained using other parts of ISO 8503.

Information regarding the magnitude of errors associated with use of replica tape is given in [Annex A](#).

Advantages of the replica tape method include the fact that it affords numerical characterization, yields a permanent record, works well on curved surfaces and benefits from a geographically broad base of user experience over a period of several decades.