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Thermal spraying - Pre-treatment of surfaces of metallic parts and components for thermal spraying

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 13507:2018 sisaldab Euroopa standardi EN 13507:2018 ingliskeelset teksti.	This Estonian standard EVS-EN 13507:2018 consists of the English text of the European standard EN 13507:2018.
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.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 08.08.2018.	Date of Availability of the European standard is 08.08.2018.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

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EUROPEAN STANDARD

EN 13507

NORME EUROPÉENNE

EUROPÄISCHE NORM

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ICS 25.220.10; 25.220.20

Supersedes EN 13507:2010

English Version

Thermal spraying - Pre-treatment of surfaces of metallic parts and components for thermal spraying

Projection thermique - Traitement préalable de surface de pièces et composants métalliques pour projection thermiques

Thermisches Spritzen - Vorbehandlung von Oberflächen metallischer Werkstücke und Bauteile für das thermische Spritzen

This European Standard was approved by CEN on 9 April 2018.

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

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European foreword

This document (EN 13507:2018) has been prepared by Technical Committee CEN/TC 240 “Thermal spraying and thermally sprayed coatings”, 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 February 2019, and conflicting national standards shall be withdrawn at the latest by February 2019.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 13507:2010.

This third edition of EN 13507 cancels and replaces EN 13507:2010, which has been technically revised and, in addition to the change in number, contains the following changes:

- update of normative references;
- Revision of subclause 5.6 (Bond coatings).

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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This document specifies the processing of surface preparation for thermal spraying. Important principles indicated in this European Standard are intended to be taken into consideration when surfaces of metallic parts are to be prepared for thermal spraying. This document applies for production of new parts as well as for the repair of worn parts.

This document does not apply for thermal spraying in the case of protection against atmospheric corrosion by coatings of zinc and/or aluminium and their alloys, for which EN ISO 2063-1:2017 and EN ISO 2063-2:2017 apply.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

EN 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 (ISO 8501-1)*

EN ISO 11124-1, *Preparation of steel substrates before application of paints and related products - Specifications for metallic blast-cleaning abrasives - Part 1: General introduction and classification (ISO 11124-1)*

EN ISO 11124-2, *Preparation of steel substrates before application of paints and related products - Specifications for metallic blast-cleaning abrasives - Part 2: Chilled-iron grit (ISO 11124-2)*

EN ISO 11126-1, *Preparation of steel substrates before application of paints and related products - Specifications for non-metallic blast-cleaning abrasives - Part 1: General introduction and classification (ISO 11126-1)*

3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

4 Principles

The surface preparation of a work piece has a substantial effect on the quality of the sprayed coating especially with regard to its adhesion to the substrate.

To achieve a sufficient adhesive strength the metallic surface shall be processed until a technically clean interface is generated.

The surface to be prepared shall be accessible for grit blasting. EN 15520 gives information regarding suitable component design.

Welding splashes and residues of welding slag shall be removed, and weld seams and brazed or soldered joints shall be prepared with particular accuracy. Oxides, oil, grease and other contamination shall be removed.