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Thermal spraying - Components with thermally sprayed coatings - Coating specification

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

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# EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

**EN 17001** 

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#### **English Version**

# Thermal spraying - Components with thermally sprayed coatings - Coating specification

Projection thermique - Composants avec des revêtements obtenus par projection thermique -Spécification du revêtement Thermisches Spritzen - Bauteile mit thermisch gespritzten Schichten - Schichtspezifikation

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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### EN 17001:2018 (E)

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EN 17001:2018 (E)

#### **European foreword**

This document (EN 17001:2018) 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.

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.

#### EN 17001:2018 (E)

#### 1 Scope

This European standard defines the requirements to be specified in the coating specification for a thermally sprayed coating. It applies to components and workpieces made of metallic or non-metallic materials that are to be partially or completely coated with thermally sprayed coatings. The coating can be made of metals, metal ceramics, oxide ceramics or plastics. Additional requirements for the coating manufacturer that are not coating-specific are intended to be included by defining the technical supply conditions according to EN ISO 12670.

The requirements defined in this standard are intended to be met by a component-related thermal spray procedure specification (TSPS) prepared by the coating manufacturer. The thermal spray procedure specification is intended to be documented and component-related to ensure traceability. For details, see EN 17002.

Proof that the requirements of the coating specification are met by the application of the thermal spray procedure specification can be provided by performing a component-related procedure qualification according to EN 15648.

If specific coating requirements cannot be specified by the customer, they are intended to be agreed with the contractor on the basis of the requirements for the sprayed coating – e.g. against fretting wear at high temperatures – and on the basis of the contractor's past experience.

#### 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 2063-2, Thermal spraying - Zinc, aluminium and their alloys - Part 2: Execution of corrosion protection systems (ISO 2063-2)

EN ISO 4624:2016, Paints and varnishes - Pull-off test for adhesion (ISO 4624:2016)

EN ISO 12671, Thermal spraying - Thermally sprayed coatings - Symbolic representation on drawings (ISO 12671)

EN ISO 14916, Thermal spraying - Determination of tensile adhesive strength (ISO 14916)

EN ISO 14917, Thermal spraying - Terminology, classification (ISO 14917)

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