# Letectvo a kozmonautika Anodické elektrolytické nanášanie základnej vrstvy bez obsahu šesť mocného chrómu STN EN 4868

Aerospace series - Anodic electrodeposition of hexavalent chromium free primer

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. 03/20

Obsahuje: EN 4868:2019

STN EN 4868: 2020

### EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

**EN 4868** 

September 2019

ICS 49.040

#### **English Version**

## Aerospace series - Anodic electrodeposition of hexavalent chromium free primer

Série aérospatiale - Electrodéposition anodique d'un primaire sans chrome hexavalent

Luft- und Raumfahrt - Anodische Elektrotauchlackierung von sechswertigem chromfreiem Grundierung

This European Standard was approved by CEN on 5 May 2019.

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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.

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

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EN 4868:2019 (E)

#### **European foreword**

This document (EN 4868:2019) has been prepared by the Aerospace and Defence Industries Association of Europe - Standardization (ASD-STAN).

After enquiries and votes carried out in accordance with the rules of this Association, this Standard has received the approval of the National Associations and the Official Services of the member countries of ASD, prior to its presentation to CEN.

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of an identical text or by endorsement, at the latest by March 2020, and conflicting national standards shall be withdrawn at the latest by March 2020.

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 organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

#### 1 Scope

This document defines the requirements for hexavalent chromium free anodic electrodeposition of organic coatings on aluminium and aluminium alloys for corrosion protection of parts.

The purpose of this standard is to give design, quality and manufacturing requirements. It doesn't give complete in-house process instructions; these shall be given in the processor detailed process instructions.

#### 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 3840, Aerospace series — Paints and varnishes — Technical specification

EN ISO 1463, Metallic and oxide coatings — Measurement of coating thickness — Microscopical method

EN ISO 1518-1, Paints and varnishes — Determination of scratch resistance — Part 1: Constant-loading method

EN ISO 1519, Paints and varnishes — Bend test (cylindrical mandrel)

EN ISO 2360, Non-conductive coatings on non-magnetic electrically conductive base metals — Measurement of coating thickness — Amplitude-sensitive eddy-current method

EN ISO 2409, Paints and varnishes — Cross-cut test

EN ISO 2812-1, Paints and varnishes — Determination of resistance to liquids — Part 1: Immersion in liquids other than water

EN ISO 2812-2, Paints and varnishes — Determination of resistance to liquids — Part 2: Water immersion method

EN ISO 4623-2, Paints and varnishes — Determination of resistance to filiform corrosion — Part 2: Aluminium substrates

EN ISO 4628-8, 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

EN ISO 4628-10, Paints and varnishes — Evaluation of degradation of coatings — Designation of quantity and size of defects, and of intensity of uniform changes in appearance — Part 10: Assessment of degree of filiform corrosion

EN ISO 9220, Metallic coatings — Measurement of coating thickness — Scanning electron microscope method

EN ISO 9227, Corrosion tests in artificial atmospheres — Salt spray tests

EN ISO 17872, Paints and varnishes — Guidelines for the introduction of scribe marks through coatings on metallic panels for corrosion testing

#### koniec náhľadu – text ďalej pokračuje v platenej verzii STN