

## SLOVENSKI STANDARD oSIST prEN ISO 27830:2016

01-junij-2016

# Kovinske in druge anorganske prevleke - Smernice za specifikacijo kovinskih in anorganskih premazov (ISO/DIS 27830:2016)

Metallic and other inorganic coatings - Guidelines for specifying metallic and inorganic coatings (ISO/DIS 27830:2016)

Metallische und andere anorganische Überzüge - Leitfaden zur Spezifikation von metallischen und anorganischen Überzügen (ISO/DIS 27830:2016)

Revêtements métalliques et autres revêtements inorganiques - Lignes directrices pour spécifier des revêtements métalliques et inorganiques (ISO/DIS 27830:2016)

51079ea8fd3d/sist-en-iso-27830-2018

Ta slovenski standard je istoveten z: prEN ISO 27830

ICS: 25.220.40 Kovinske prevleke

Metallic coatings

oSIST prEN ISO 27830:2016

en,fr,de

oSIST prEN ISO 27830:2016

# iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN ISO 27830:2018</u> https://standards.iteh.ai/catalog/standards/sist/8f37ebec-c972-4a65-8281-51079ea8fd3d/sist-en-iso-27830-2018

# DRAFT INTERNATIONAL STANDARD ISO/DIS 27830

ISO/TC 107/SC 3

Voting begins on: **2016-04-07** 

Secretariat: KATS

Voting terminates on: 2016-07-06

# Metallic and other inorganic coatings — Guidelines for specifying metallic and inorganic coatings

*Revêtements métalliques et autres revêtements inorganiques — Lignes directrices pour spécifier des revêtements métalliques et inorganiques* 

ICS: 25.220.20; 25.220.40

# iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN ISO 27830:2018</u> https://standards.iteh.ai/catalog/standards/sist/8f37ebec-c972-4a65-8281-51079ea8fd3d/sist-en-iso-27830-2018

### **ISO/CEN PARALLEL PROCESSING**

This draft has been developed within the European Committee for Standardization (CEN), and processed under the **CEN lead** mode of collaboration as defined in the Vienna Agreement.

This draft is hereby submitted to the ISO member bodies and to the CEN member bodies for a parallel three month enquiry.

To expedite distribution, this document is circulated as received from the committee secretariat. ISO Central Secretariat work of editing and text composition will be undertaken at publication stage.



Reference number ISO/DIS 27830:2016(E)

THIS DOCUMENT IS A DRAFT CIRCULATED FOR COMMENT AND APPROVAL. IT IS THEREFORE SUBJECT TO CHANGE AND MAY NOT BE REFERRED TO AS AN INTERNATIONAL STANDARD UNTIL PUBLISHED AS SUCH.

IN ADDITION TO THEIR EVALUATION AS BEING ACCEPTABLE FOR INDUSTRIAL, TECHNOLOGICAL, COMMERCIAL AND USER PURPOSES, DRAFT INTERNATIONAL STANDARDS MAY ON OCCASION HAVE TO BE CONSIDERED IN THE LIGHT OF THEIR POTENTIAL TO BECOME STANDARDS TO WHICH REFERENCE MAY BE MADE IN NATIONAL REGULATIONS.

RECIPIENTS OF THIS DRAFT ARE INVITED TO SUBMIT, WITH THEIR COMMENTS, NOTIFICATION OF ANY RELEVANT PATENT RIGHTS OF WHICH THEY ARE AWARE AND TO PROVIDE SUPPORTING DOCUMENTATION.

# iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN ISO 27830:2018</u> https://standards.iteh.ai/catalog/standards/sist/8f37ebec-c972-4a65-8281-51079ea8fd3d/sist-en-iso-27830-2018



© ISO 2016, 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

## Contents

Forew	vord	iv
Introduction		v
1	Scope	1
2	Information to be supplied to the electroplater (or processor) by the purchaser	1
2.1	Essential information	1
2.2	Additional information	2
3	Designation	2
3.1	General	2
3.2	Designation of the basis material	3
3.3	Designation of heat treatment requirements	4
3.4	Designation of the type and thickness of the coatings	4
4	Sampling	4
Annex	Annex A (normative) Symbols for designating metallic and other inorganic coatings	
A.1	Basis materials	5
A.2	Coatings	5
A.3	Undercoats	6
Annex B (informative) Examples of designations		7
B.1	Decorative nickel plus chromium (ISO 1456[1])	7
<b>B.2</b>	Electrodeposited zinc with supplementary treatments on iron or steel (ISO 2081[4])	7
B.3	Electrodeposited gold (ISO 27874[16])	7
<b>B.4</b>	Decorative copper plus nickel plus chromium on plastics (ISO 4525[9])	7
B.5	Engineering nickel and nickel alloy coatings (ISO 4526[10])	7
<b>B.6</b>	Autocatalytic nickel-phosphorus alloy coatings (ISO 4527[11])	8
<b>B.7</b>	Vapour deposited cadmium coating (ISO 22778[15])	8
Annex	c (informative) Service condition numbers and severity	9
Biblio	Bibliography	

### 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 WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

ISO 27830 was prepared by Technical Committee ISO/TC 107, *Metallic and other inorganic coatings*, Subcommittee SC 3, *Electrodeposited coatings and related finishes*, and CEN/TC 262 *Metallic and other inorganic coatings*.

This second edition cancels and replaces the first edition (ISO 27830:2008), which has been technically revised.

### Introduction

This International Standard specifies the technical requirements of metallic and other inorganic coatings in order to develop consistent technical standards, facilitate the understanding of technical requirements and ensure a standard format.

# iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN ISO 27830:2018</u> https://standards.iteh.ai/catalog/standards/sist/8f37ebec-c972-4a65-8281-51079ea8fd3d/sist-en-iso-27830-2018 oSIST prEN ISO 27830:2016

# iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN ISO 27830:2018</u> https://standards.iteh.ai/catalog/standards/sist/8f37ebec-c972-4a65-8281-51079ea8fd3d/sist-en-iso-27830-2018

# Metallic and other inorganic coatings — Guidelines for specifying metallic and inorganic coatings

### 1 Scope

This International Standard specifies the technical requirements of metallic and other inorganic coatings in order to develop consistent technical standards and establishes a standard format for designating the coatings. It applies to International Standards for electrodeposited, autocatalytic and vapour deposited coatings.

Detailed technical requirements for individual coatings are not given in this International Standard, but can be found in the International Standards listed in the Bibliography.

This International Standard does not apply to thermally sprayed and porcelain enamel coatings.

This International Standard is not to be specified in technical standards, product specifications, contracts, purchase orders or on engineering drawings, as invoking a "method of specifying" in these documents is not contractually binding.

WARNING — This International Standard might not be compliant with some countries' health, safety and environmental legislations and calls for the use of substances and/or procedures that might be injurious to health if adequate safety measures are not taken. This International Standard does not address any health hazards, safety or environmental matters and legislations associated with its use. It is the responsibility of the user of this International Standard to establish appropriate health, safety and environmentally acceptable practices and take appropriate action to comply with any national, regional and/or International regulations.

Compliance with this International Standard does not of itself confer immunity from legal obligations

# 2 Information to be supplied to the electroplater (or processor) by the purchaser

#### 2.1 Essential information

The purchaser shall provide the essential information requested in this sub-clause, in writing, as part of the contract, purchase order, detailed product specification and/or on engineering drawings.

The essential information shall include the following items with cross -references, in parentheses, to the clauses and sub-clauses that provide further details about the requirements and test methods.

a) The number of the International Standard and the designation as specified in the International Standard (see Clause 5);

b) The significant surface indicated by drawings or by suitably marked specimens

c) The nature, condition and finish of the basis material, if they affect serviceability and/or the appearance of the coating (see Clause 6);

d) The tensile strength of the component to enable requirements in 5.3 to be taken in to account.

e) The requirements for heat treatment before and/or after coating, if the requirements are not in accordance with ISO 9587 or ISO 9588

#### 2.2 Additional information

Additional information not included in 2.1 that may be required for a specific coating, product or application, may include, for example,

- a) The appearance required, for example, bright, dull, colour, preferably with samples of the required finish (if not specified in an applicable ISO Standard)
- b) The accepted position(s) on the surface for unavoidable defects, such as jig or contact marks or areas in which it is permitted for the coating to be absent
- c) The standards for determining that thickness, corrosion resistance, adhesion, porosity or other requirements have been met
- d) Sampling methods, acceptance levels and inspection requirements for quality control purposes
- e) Extra information, for example, packaging or handling instructions or a delivery address shall be included where relevant

#### **3** Designation

3.1 General

### 3.1.1 Designation specification

The designation shall comprise the following: EN ISO 27830-2018

- https://standards.iteh.ai/catalog/standards/sist/8f37ebec-c972-4a65-8281-
- a) electrodeposited coating 51079ea8fd3d/sist-en-iso-27830-2018
- b) the number of the International Standard to which the required coating shall conform:#
- c) a hyphen:
- d) the basis metal code
- e) a solidus:
- f) the additional applicable codes separated by solidi for every stage of the coating sequence in the order of application (see 3.3 and 3.5)

Double separators shall be used to indicate any missing stages (i e when a particular stage is not required)

NOTE 1 Allowed composition and purity tolerances for the values shown in the designation are specified in the International Standards for the coatings to which they are applicable

NOTE 2 The purchaser should be guided in their choice of designation by the severity of service conditions to be withstood by the coating,