ICS 25.220.50 SLOVENSKÁ TECHNICKÁ NORMA Marec 2020

STN	**Sklené a porcelánové smalty Rekuperačné, smaltované panely a panely s výplňou pre výmenníky tepla vzduch-plyn a plyn-plyn Špecifikácie (ISO 28763: 2019)**	**STN EN ISO 28763** 94 5060

Vitreous and porcelain enamels - Regenerative, enamelled and packed panels for air-gas and gas-gas heat exchangers - Specifications (ISO 28763:2019)

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. 02/20

Obsahuje: EN ISO 28763:2019, ISO 28763:2019

Oznámením tejto normy sa ruší
STN EN ISO 28763 (94 5060) z októbra 2011

130268

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 28763

September 2019

ICS 25.220.50 Supersedes EN ISO 28763:2011

English Version

Vitreous and porcelain enamels - Regenerative, enamelled and packed panels for air-gas and gas-gas heat exchangers - Specifications (ISO 28763:2019)

Émaux vitrifiés - Échangeurs thermiques pour réchauffeurs air-gaz et gaz-gaz à empilement de panneaux émaillés remplaçables et démontables - Spécifications (ISO 28763:2019)

Emails und Emaillierungen - Regenerative, emaillierte und gepackte Bleche für Luft-Gas- und Gas-Gas-Wärmeaustauscher - Anforderungen (ISO 28763:2019)

This European Standard was approved by CEN on 13 August 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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Ref. No. EN ISO 28763:2019 E

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European foreword

This document (EN ISO 28763:2019) has been prepared by Technical Committee ISO/TC 107 "Metallic and other inorganic coatings" in collaboration with Technical Committee CEN/TC 262 “Metallic and other inorganic coatings, including for corrosion protection and corrosion testing of metals and alloys” the secretariat of which is held by BSI.

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.

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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, Ireland, 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.

Endorsement notice

The text of ISO 28763:2019 has been approved by CEN as EN ISO 28763:2019 without any modification.

INTERNATIONAL STANDARD

ISO 28763

Second edition
2019-08

Vitreous and porcelain enamels — Regenerative, enamelled and packed panels for air-gas and gas-gas heat exchangers — Specifications

Émaux vitrifiés — Échangeurs thermiques pour réchauffeurs air-gaz et gaz-gaz à empilement de panneaux émaillés remplaçables et démontables — Spécifications

Reference number
ISO 28763:2019(E)

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Published in Switzerland

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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 of the voluntary nature of standards, 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 www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 107, *Metallic and other inorganic coatings*.

This second edition cancels and replaces the first edition (ISO 28763:2008), which has been technically revised. The main changes compared with previous edition are as follows:

— the normative references have been updated;

— the terms and definitions have been updated;

— references to normative documents and respective clauses have been updated;

— references and requirements for hydrogen permeability of steel have been updated in Clause 4;

— requirements for visual examinations have been amended in Clause 6.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

INTERNATIONAL STANDARD **ISO 28763:2019(E)**

Vitreous and porcelain enamels — Regenerative, enamelled and packed panels for air-gas and gas-gas heat exchangers — Specifications

1 Scope

This document specifies the minimum requirements and the functional characteristics of enamel coatings applied by any process, such as wet dipping, wet flow-coating, wet spraying, wet electrostatic spraying, wet electrodeposition or dry-powder electrostatic spraying, to profiled steel heat exchanger panels in regenerative heat exchangers, before and after packing in baskets.

For very severe service conditions, or to obtain extended operational life, more stringent limits can be agreed between customer and supplier.

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.

ISO 105-J03, *Textiles — Tests for colour fastness — Part J03: Calculation of colour differences*

ISO 2178, *Non-magnetic coatings on magnetic substrates — Measurement of coating thickness — Magnetic method*

ISO 4534, *Vitreous and porcelain enamels — Determination of fluidity behaviour — Fusion flow test*

ISO 7991, *Glass — Determination of coefficient of mean linear thermal expansion*

ISO 8289:2000, *Vitreous and porcelain enamels — Low voltage test for detecting and locating defects*

ISO 19496-1, *Vitreous and porcelain enamels — Terminology — Part 1: Terms and definitions*

ISO 28706-2:2017, *Vitreous and porcelain enamels — Determination of resistance to chemical corrosion — Part 2: Determination of resistance to chemical corrosion by boiling acids, boiling neutral liquids, alkaline liquids and/or their vapours*

ISO 28723, *Vitreous and porcelain enamels — Determination of the edge covering on enamelled steel plate to be used in heat exchangers*

ISO 28764, *Vitreous and porcelain enamels — Production of specimens for testing enamels on sheet steel, sheet aluminium and cast iron*

EN 10204:2004, *Metallic products — Types of inspection documents*

EN 10209:2013, *Cold rolled low carbon steel flat products for vitreous enamelling — Technical delivery conditions*

