ICS 25.220.50, 91.140.60 SLOVENSKÁ TECHNICKÁ NORMA November 2019

STN	**Sklené a porcelánové smalty Obojstranne smaltované armatúry a tvarovky tlakových potrubí na zásobovanie neupravenou a pitnou vodou Kvalitatívne požiadavky a skúšanie (ISO 11177: 2019)**	**STN EN ISO 11177** 94 5080

Vitreous and porcelain enamels - Inside and outside enamelled valves and pressure pipe fittings for untreated and potable water supply - Quality requirements and testing (ISO 11177:2019)

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. 10/19

Obsahuje: EN ISO 11177:2019, ISO 11177:2019

Oznámením tejto normy sa ruší
STN EN ISO 11177 (94 5080) zo septembra 2016

129634

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 11177

April 2019

ICS 25.220.50; 91.140.60 Supersedes EN ISO 11177:2016

English Version

Vitreous and porcelain enamels - Inside and outside enamelled valves and pressure pipe fittings for untreated and potable water supply - Quality requirements and testing (ISO 11177:2019)

Émaux vitrifiés - Robinetterie et raccords de tuyauterie pour conduites forcées émaillés à l'intérieur et à l'extérieur destinés à l'alimentation en eau non traitée et en eau potable - Exigences de qualité et essais (ISO 11177:2018)

Emails und Emaillierungen - Innen- und außenemaillierte Armaturen und Druckrohrformstücke für die Roh- und Trinkwasserversorgung - Qualitätsanforderungen und Prüfung (ISO 11177:2019)

This European Standard was approved by CEN on 21 March 2019.

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Ref. No. EN ISO 11177:2019 E

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European foreword

This document (EN ISO 11177:2019) 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of an identical text or by endorsement, at the latest by October 2019, and conflicting national standards shall be withdrawn at the latest by October 2019.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 ISO 11177:2016.

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, 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.

Endorsement notice

The text of ISO 11177:2019 has been approved by CEN as EN ISO 11177:2019 without any modification.

INTERNATIONAL STANDARD

ISO 11177

Second edition
2019-03

Vitreous and porcelain enamels — Inside and outside enamelled valves and pressure pipe fittings for untreated and potable water supply — Quality requirements and testing

Émaux vitrifiés — Robinetterie et raccords de tuyauterie pour conduites forcées émaillés à l'intérieur et à l'extérieur destinés à l'alimentation en eau non traitée et en eau potable — Exigences de qualité et essais

Reference number
ISO 11177:2019(E)

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Fax: +41 22 749 09 47
Email: copyright@iso.org
Website: www.iso.org

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 11177:2016), which has been technically revised. The following change has been made:

— in 5.6, the normative reference has been changed from ISO 28706-2 to ISO 28706-1:2008, Clause 9, “Class AA”.

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.

Introduction

The requirements defined in this document regarding the product quality of enamelled valves and pressure pipe fittings for untreated and potable water supply take into account the real stress conditions to which a component can be subjected in the course of its operating life. Typical types of stress are

— during storage: climate, UV radiation, mechanical stress,

— during transportation: mechanical stress, e.g. at certain points (impact), laterally (friction),

— during preparation for installation: cleaning agents, mechanical stress, e.g. at certain points (impact), laterally (friction),

— during installation: mechanical stress, and

— during operation: abrasion caused by the carried medium, corrosion from surrounding medium, mechanical stress from shifting ground loads, UV radiation with valves built in above ground.

INTERNATIONAL STANDARD **ISO 11177:2019(E)**

Vitreous and porcelain enamels — Inside and outside enamelled valves and pressure pipe fittings for untreated and potable water supply — Quality requirements and testing

1 Scope

This document specifies the requirements for product quality and product testing of enamelled valves and pressure pipe fittings for untreated and potable water supply.

It does not apply to chemical service glass-enamel and apparatus enamel.

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

ISO 6370-1, *Vitreous and porcelain enamels — Determination of the resistance to abrasion — Part 1: Abrasion testing apparatus*

ISO 6370-2, *Vitreous and porcelain enamels — Determination of the resistance to abrasion — Part 2: Loss in mass after sub-surface abrasion*

ISO 13807, *Vitreous and porcelain enamels — Determination of crack formation temperature in the thermal shock testing of enamels for the chemical industry*

ISO 15695, *Vitreous and porcelain enamels — Determination of scratch resistance of enamel finishes*

ISO 16474-1, *Paints and varnishes — Methods of exposure to laboratory light sources — Part 1: General guidance*

ISO 16474-2, *Paints and varnishes — Methods of exposure to laboratory light sources — Part 2: Xenon-arc lamps*

ISO 28706-1:2008, *Vitreous and porcelain enamels — Determination of resistance to chemical corrosion — Part 1: Determination of resistance to chemical corrosion by acids at room temperature*

ISO 28706-2, *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*

EN 15771, *Vitreous and porcelain enamels — Determination of surface scratch hardness according to the Mohs scale*

DIN 50929-3, *Corrosion of metals — Probability of corrosion of metallic materials when subject to corrosion from the outside — Buried and underwater pipelines and structural components*