



NSAI
Standards

Irish Standard
I.S. EN ISO 28721-4:2015

Vitreous and porcelain enamels - Glass-lined apparatus for process plants - Part 4: Quality requirements for glass-lined flanged steel pipes and flanged steel fittings (ISO 28721-4:2015)

I.S. EN ISO 28721-4:2015

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National Foreword

I.S. EN ISO 28721-4:2015 is the adopted Irish version of the European Document EN ISO 28721-4:2015, Vitreous and porcelain enamels - Glass-lined apparatus for process plants - Part 4: Quality requirements for glass-lined flanged steel pipes and flanged steel fittings (ISO 28721-4:2015)

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EUROPEAN STANDARD

EN ISO 28721-4

NORME EUROPÉENNE

EUROPÄISCHE NORM

November 2015

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Supersedes EN ISO 28721-4:2012

English Version

**Vitreous and porcelain enamels - Glass-lined apparatus for
process plants - Part 4: Quality requirements for glass-
lined flanged steel pipes and flanged steel fittings (ISO
28721-4:2015)**

Émaux vitrifiés - Appareils émaillés pour les
installations industrielles - Partie 4: Exigences de
qualité pour les tubes et raccords à brides en acier
émaillé (ISO 28721-4:2015)

Emails und Emailierungen - Emailierte Apparate für
verfahrenstechnische Anlagen - Teil 4:
Qualitätsanforderungen an Flansch-Rohre und
Flansch-Formstücke aus Stahl mit Emailierung (ISO
28721-4:2015)

This European Standard was approved by CEN on 1 November 2015.

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COMITÉ EUROPÉEN DE NORMALISATION
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EN ISO 28721-4:2015 (E)

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European foreword

This document (EN ISO 28721-4:2015) 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" 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of an identical text or by endorsement, at the latest by May 2016, and conflicting national standards shall be withdrawn at the latest by May 2016.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN ISO 28721-4:2012.

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, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 28721-4:2015 has been approved by CEN as EN ISO 28721-4:2015 without any modification.

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**INTERNATIONAL
STANDARD**

**ISO
28721-4**

Second edition
2015-11-01

**Vitreous and porcelain enamels —
Glass-lined apparatus for process
plants —**

Part 4:

**Quality requirements for glass-lined
flanged steel pipes and flanged steel
fittings**

*Émaux vitrifiés — Appareils émaillés pour les installations
industrielles —*

*Partie 4: Exigences de qualité pour les tubes et raccords à brides en
acier émaillé*



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ISO 28721-4:2015(E)

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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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](#)

The committee responsible for this document is ISO/TC 107, *Metallic and other inorganic coatings*.

This second edition cancels and replaces the first edition (ISO 28721-4:2010), which has been technically revised.

ISO 28721 consists of the following parts, under the general title *Vitreous and porcelain enamels — Glass-lined apparatus for process plants*:

- *Part 1: Quality requirements for apparatus, components, appliances and accessories*
- *Part 2: Designation and specification of resistance to chemical attack and thermal shock*
- *Part 3: Thermal shock resistance*
- *Part 4: Quality requirements for glass-lined flanged steel pipes and flanged steel fittings*
- *Part 5: Presentation and characterization of defects*

Vitreous and porcelain enamels — Glass-lined apparatus for process plants —

Part 4:

Quality requirements for glass-lined flanged steel pipes and flanged steel fittings

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1 Scope

This part of ISO 28721 specifies the quality requirements for glass-lined flanged steel pipes and flanged steel fittings used for process plants.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 2746, *Vitreous and porcelain enamels — High voltage test*

ISO 5817, *Welding — Fusion-welded joints in steel, nickel, titanium and their alloys (beam welding excluded) — Quality levels for imperfections*

ISO 8501-1, *Preparation of steel substrates before application of paints and related products — Visual assessment of surface cleanliness — Part 1: Rust grades and preparation grades of uncoated steel substrates and of steel substrates after overall removal of previous coatings*

ISO 12944-5, *Paints and varnishes — Corrosion protection of steel structures by protective paint systems — Part 5: Protective paint systems*

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 and/or their vapours*

ISO 28706-4, *Vitreous and porcelain enamels — Determination of resistance to chemical corrosion — Part 4: Determination of resistance to chemical corrosion by alkaline liquids using a cylindrical vessel*

ISO 28706-5, *Vitreous and porcelain enamels — Determination of resistance to chemical corrosion — Part 5: Determination of resistance to chemical corrosion in closed systems*

EN 1708-1, *Welding — Basic welded joint details in steel — Part 1: Pressurized components*

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

EN 13480-2, *Metallic industrial piping — Part 2: Materials*

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