

**Vitreous and porcelain enamels - Glass-lined apparatus  
for process plants - Part 1: Quality requirements for  
apparatus, components, appliances and accessories  
(ISO 28721-1:2008)**

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## NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN ISO 28721-1:2011 sisaldab Euroopa standardi EN ISO 28721-1:2011 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 30.04.2011 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 13.04.2011.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN ISO 28721-1:2011 consists of the English text of the European standard EN ISO 28721-1:2011.

This standard is ratified with the order of Estonian Centre for Standardisation dated 30.04.2011 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

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English Version

**Vitreous and porcelain enamels - Glass-lined apparatus for process plants - Part 1: Quality requirements for apparatus, components, appliances and accessories (ISO 28721-1:2008)**

Émaux vitrifiés - Appareils émaillés pour les installations industrielles - Partie 1: Exigences de qualité relatives aux appareillages, composants, appareils et accessoires (ISO 28721-1:2008)

Emails und Emailierungen - Emailierte Apparate für verfahrenstechnische Anlagen - Teil 1: Qualitätsanforderungen für Apparate, Apparateteile, Einbau- und Zubehörteile (ISO 28721-1:2008)

This European Standard was approved by CEN on 17 March 2011.

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EUROPÄISCHES KOMITEE FÜR NORMUNG

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## Foreword

The text of ISO 28721-1:2008 has been prepared by Technical Committee ISO/TC 107 “Metallic and other inorganic coatings” of the International Organization for Standardization (ISO) and has been taken over as EN ISO 28721-1:2011 by 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of an identical text or by endorsement, at the latest by October 2011, and conflicting national standards shall be withdrawn at the latest by October 2011.

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### Endorsement notice

The text of ISO 28721-1:2008 has been approved by CEN as a EN ISO 28721-1:2011 without any modification.

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

## Part 1: Quality requirements for apparatus, components, appliances and accessories

### 1 Scope

This part of ISO 28721 specifies the quality requirements for apparatus, components, appliances and accessories of glass-lined steel (including semi-crystallized enamel coatings) and glass-lined steel castings used for process plants. It specifies the quality requirements and the tests to be carried out by the manufacturer as well as the action to be taken to repair defects.

It is also applicable to glass-lined pumps, pump components and fittings.

It is not applicable to glass-lined flanged steel pipes or glass-lined flanged steel fittings.

NOTE 1 Provisions for glass-lined flanged steel pipes and glass-lined flanged steel fittings are given in DIN 2876 [1].

The test methods specified cover checking the enamel, the dimensional accuracy and the performance of apparatus and components.

This part of ISO 28721 applies to new apparatus and components as well as used items that have been re-enamelled.

It does not contain requirements regarding the chemical or physical properties of vitreous and porcelain enamels.

NOTE 2 Examples of test reports are given in Annex A.

### 2 Normative references

The following referenced documents are indispensable for the application 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 780, *Packaging — Pictorial marking for handling of goods*

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

ISO 28721-2, *Vitreous and porcelain enamels — Glass-lined apparatus for process plants — Part 2: Designation and specification of resistance to chemical attack and thermal shock*

ISO 28721-3, *Vitreous and porcelain enamels — Glass-lined apparatus for process plants — Part 3: Thermal shock resistance*

EN 14430, *Vitreous and porcelain enamels — High voltage test*