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**Cold-reduced carbon steel sheet for  
vitreous enamelling**

*Tôles en acier au carbone laminées à froid pour émaillage par  
vitrification*



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# Contents

Page

Foreword .....	iv
1 Scope .....	1
2 Normative references .....	1
3 Terms and definitions .....	1
4 Quality designations for steel sheets for vitreous enamelling .....	2
5 Conditions of manufacture .....	2
5.1 Steelmaking .....	2
5.2 Chemical composition .....	2
5.3 Chemical analysis .....	3
5.4 Weldability .....	4
5.5 Application .....	4
5.6 Mechanical properties .....	4
5.7 Strain ageing .....	5
5.8 Surface condition .....	6
5.9 Surface finish .....	6
5.10 Surface quality .....	6
5.11 Oiling .....	6
6 Dimensional and shape tolerances .....	6
7 Tensile test sampling .....	6
8 Tensile test requirements .....	6
9 Retests .....	7
10 Resubmission .....	7
11 Workmanship .....	7
12 Inspection and acceptance .....	7
13 Coil size .....	7
14 Marking .....	7
15 Information to be supplied by the purchaser .....	8
Bibliography .....	9

## 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.

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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.

ISO 5001 was prepared by Technical Committee ISO/TC 17, *Steel*, Subcommittee SC 12, *Continuous mill flat rolled products*.

This fifth edition cancels and replaces the fourth edition (ISO 5001:2007), which has been technically revised.

# Cold-reduced carbon steel sheet for vitreous enamelling

## 1 Scope

This International Standard applies to cold-reduced carbon steel sheet of commercial and drawing qualities for vitreous enamelling, where the surface of the sheet and chemical composition of the base metal are of prime importance.

## 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 6892-1, *Metallic materials — Tensile testing — Part 1: Method of test at room temperature*

ISO 16162, *Cold-rolled steel sheet products — Dimensional and shape tolerances*

## 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

### 3.1

#### **steel sheet for vitreous enamelling**

product obtained from cold-reduced steel sheet having a matte finish and for which proper chemical composition and processing are selected by the producer to prepare the sheet for both fabrication and vitreous enamelling.

NOTE It is produced in thicknesses of 0,35 mm and thicker (commonly up to 3 mm) and in widths of 600 mm and wider in coils and cut lengths. Sheet for vitreous enamelling less than 600 mm wide may be slit from wide sheet and will be considered sheet.

### 3.2

#### **skin pass**

final light cold rolling of cold-reduced fully processed sheet

NOTE The purpose of the final light cold rolling is one or more of the following:

- to temporarily minimize the occurrence of stretcher strains (Lüders' lines) or fluting during fabrication of finished parts;
- to obtain the required surface finish for vitreous enamelling;
- to control shape.

### 3.3

#### **stabilized interstitial steel**

extra-low-carbon steel in which all interstitial elements are combined with titanium and/or equivalent elements

## 3.4 Types for vitreous enamelling

### 3.4.1

#### **type 1**

sheet steel suitable for two-coat enamelling

NOTE The base metal of this type loses strength after firing the enamel, and if this is a problem, the producer should be consulted.