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BS ISO 5950:2012



BSI Standards Publication

Electrolytic tin-coated cold-reduced carbon steel sheet of commercial and drawing qualities

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This British Standard is the UK implementation of ISO 5950:2012. It supersedes BS ISO 5950:2008 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee ISE/109, Coated and Uncoated Flat Products to be Used for Cold Forming.

A list of organizations represented on this committee can be obtained on request to its secretary.

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*Tôles en acier au carbone laminées à froid, revêtues en continu
d'un dépôt électrolytique d'étain, de qualités commerciale et pour
emboutissage*



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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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 5950 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 5950:2008), which has been technically revised.

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Electrolytic tin-coated cold-reduced carbon steel sheet of commercial and drawing qualities

1 Scope

1.1 This International Standard applies to cold-reduced carbon steel sheet of commercial and drawing qualities coated in coil or cut length forms by electro-deposition of tin. The product is commonly known as electrolytic tin-coated sheet and is used where solderability is desired, appearance is important, or a degree of corrosion resistance under specific conditions is advantageous and coating mass can be specified. The coating is expressed as the total coating on both surfaces, in grams per square metre. The coating mass specified should be compatible with the desired service life, thickness of the base metal and the forming requirements involved. A designation system (Clause 4) includes the coating designation, coating condition and quality.

1.2 This International Standard does not cover tinplate and blackplate.

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

electrolytic tin-coated sheet

product obtained by electrolytic deposition of tin on cold-reduced steel sheet on a continuous electrolytic tinning line to produce either tin-coated coils or tin-coated cut lengths

3.2

skin pass

light cold-rolling of the cold-reduced and annealed sheet prior to electro-tinning

NOTE The purposes of skin passing are one or more of the following:

- a) to minimize the appearance of coil breaks, stretcher strains and fluting;
- b) to control the shape;
- c) to obtain the required surface finish.

An increase in hardness and some loss in ductility will result from skin passing.

3.3

aluminum killed

steel which has been deoxidized with aluminum sufficient to prevent the evolution of gas during solidification