

MAURITIAN
STANDARD

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1461:2022

Third edition
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**Hot dip galvanized coatings on
fabricated iron and steel articles—
Specifications and test methods**

ICS 25.220.40



**Mauritius Standards Bureau
Moka**

National foreword

This Mauritian Standard is identical with the International Standard **ISO 1461:2022**, *Hot dip galvanized coatings on fabricated iron and steel articles – Specifications and test methods*. It was adopted by the Mauritius Standards Bureau on the recommendation of the **Chemical and Related Products Standards Committee**. The document was approved by the Standards Council on 31 March 2023 and notified in the Government Gazette on **21 April 2023***.

This third edition cancels and replaces the second edition (ISO 1461:2009), which has been technically revised.

For the purpose of this standard the following change should be made:

- The 'decimal comma' should be replaced by 'decimal point'.

The main changes compared to the previous edition are as follows:

- definitions have been added for 'galvanizer', 'after-treatment', 'additional coating', 'wet storage stain' and 'duplex system' in Clause 3;
- the difficulty to remove flux residues and zinc ash when access is restricted has been recognised in 6.1;
- procedures for choice of reference areas have been clarified and additional requirements to avoid reference areas on certain small ancillary elements on a larger article have been added in 6.2.3;
- requirements for renovation of uncoated areas have been revised: the requirements for the pigment of a zinc-containing paint to conform with ISO 3549 have been removed; Annex C has been extended to include additional information on the suitability of different methods of renovation given in 6.3;
- all requirements related to coating thickness, including Table 3 and Table 4, have been placed within 6.5, including requirements linked to the size of the article in the control sample previously within 6.2.3; the lower coating thicknesses that can result in ultra-low reactive steels are recognised in new requirements for these steel types in 6.5;
- information on corrosion resistance of galvanized coatings has been updated, including the reference to ISO 9224 for longer-term corrosion resistance in Annex E.

***General notice No. 529 of 2023**



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Hot dip galvanized coatings on fabricated iron and steel articles — Specifications and test methods

1 Scope

This document specifies the general properties of hot dip galvanized coatings and test methods for hot dip galvanized coatings applied by dipping fabricated iron and steel articles (including certain castings) in a zinc melt (containing not more than 2 % of other metals). This document does not apply to the following:

- a) sheet, wire and woven or welded mesh products that are continuously hot dip galvanized;
- b) tube and pipe that are hot dip galvanized in automatic plants;
- c) hot dip galvanized products (e.g. fasteners) for which specific standards exist and which can include additional requirements or requirements which are different from those of this document.

NOTE Individual product standards can incorporate this document for the galvanized coating by quoting its number, or can incorporate it with modifications specific to the product. Different requirements can also be made for galvanized coatings on products intended to meet specific regulatory requirements.

This document does not apply to after-treatment or additional coating of hot dip galvanized articles.

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 752, *Zinc ingots*

ISO 1460, *Metallic coatings — Hot dip galvanized coatings on ferrous materials — Gravimetric determination of the mass per unit area*

ISO 2064, *Metallic and other inorganic coatings — Definitions and conventions concerning the measurement of thickness*

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

ISO 2859-1, *Sampling procedures for inspection by attributes — Part 1: Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection*

ISO 2859-2, *Sampling procedures for inspection by attributes — Part 2: Sampling plans indexed by limiting quality (LQ) for isolated lot inspection*

ISO 2859-3, *Sampling procedures for inspection by attributes — Part 3: Skip-lot sampling procedures*

ISO 10474, *Steel and steel products — Inspection documents*

ISO 14713-2:2019, *Zinc coatings — Guidelines and recommendations for the protection against corrosion of iron and steel in structures — Part 2: Hot dip galvanizing*

EN 1179, *Zinc and zinc alloys — Primary zinc*

EN 13283, *Zinc and zinc alloys — Secondary zinc*