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G164-18
National Standard of Canada

Hot dip galvanizing of irregularly shaped articles

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REVISED MAY 2020

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Preface

This is the fourth edition of CSA G164, *Hot dip galvanizing of irregularly shaped articles*. It supersedes the previous editions published in 1992, 1981, and 1965.

When a general revision of the series was initiated, it was decided to prepare three new Standards, or series of Standards, covering wire, sheets, and irregularly shaped articles, respectively. Three new technical committees were then organized to deal with each of the three types of articles.

This Standard defines the requirements for hot dip galvanizing of irregularly shaped articles intended or primarily for use in electrical and communication systems and the methods of testing for compliance.

Annex E describes other processes of zinc applications for corrosion resistance.

This Standard was prepared by the Technical Committee on Communication and Power Line Hardware under the jurisdiction of the Strategic Steering Committee on Power Engineering and EMC and was formally approved by the Technical Committee.

This Standard has been developed in compliance with Standards Council of Canada requirements for National Standards of Canada. It has been published as a National Standard of Canada by CSA Group.

Notes:

1) *Use of the singular does not exclude the plural (and vice versa) when the sense allows.*
2) *Although the intended primary application of this Standard is stated in its Scope, it is important to note that it remains the responsibility of the users of the Standard to judge its suitability for their particular purpose.*
3) *This Standard was developed by consensus, which is defined by* CSA Policy governing standardization — Code of good practice for standardization *as "substantial agreement. Consensus implies much more than a simple majority, but not necessarily unanimity". It is consistent with this definition that a member may be included in the Technical Committee list and yet not be in full agreement with all clauses of this Standard.*
4) *To submit a request for interpretation of this Standard, please send the following information to* ***inquiries@csagroup.org*** *and include "Request for Interpretation" in the subject line:*
   a) *define the problem, making reference to the specific clause, and, where appropriate, include an illustrative sketch;*
   b) *provide an explanation of circumstances surrounding the actual field condition; and*
   c) *where possible, phrase the request in such a way that a specific "yes" or "no" answer will address the issue.*

   Committee interpretations are processed in accordance with the CSA Directives and guidelines governing standardization *and are available on the* Current Standards Activities *page at standardsactivities.csa.ca.*
5) *This Standard is subject to review within five years from the date of publication. Suggestions for its improvement will be referred to the appropriate committee. To submit a proposal for change, please send the following information to inquiries@csagroup.org and include "Proposal for change" in the subject line:*
   a) *Standard designation (number);*
   b) *relevant clause, table, and/or figure number;*
   c) *wording of the proposed change; and*
   d) *rationale for the change.*

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Hot dip galvanizing of irregularly shaped articles

1 Scope

1.1

This Standard specifies the requirements for zinc coating (galvanizing) by the hot-dipping process of iron and steel products intended or primarily for use in electrical and communication systems, made from rolled, pressed, cast iron, or forged shapes such as structural sections, plates, bars, pipes, or sheets 1 mm thick and thicker.

1.2

This Standard applies to

a) both unfabricated and fabricated products such as assembled steel products, structural steel fabrications, large hollow sections bent or welded before galvanizing, and wire work fabricated from uncoated steel wire; and
b) steel forgings and iron castings that are to be galvanized separately or in batches.

1.4

This Standard does not apply to

a) the continuous galvanizing of chain link fence fabric, wire, sheet, and strip; and
b) pipe and conduit that are normally hot dip galvanized by a continuous or semicontinuous automatic process.

1.7

In this Standard, "shall" is used to express a requirement, i.e., a provision that the user is obliged to satisfy in order to comply with the standard; "should" is used to express a recommendation or that which is advised but not required; and "may" is used to express an option or that which is permissible within the limits of the Standard.

Notes accompanying clauses do not include requirements or alternative requirements; the purpose of a note accompanying a clause is to separate from the text explanatory or informative material.

Notes to tables and figures are considered part of the table or figure and may be written as requirements.

Annexes are designated normative (mandatory) or informative (non-mandatory) to define their application.

2 Reference publications

This Standard refers to the following publications and where such reference is made it shall be to the edition listed below, including all amendments published thereto.

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