

Translated and Published by Japanese Standards Association

$JIS \; H \; 8300^{\,:\,2021}$

(JTSS/JSA)

Thermal spraying — Zinc, aluminium and their alloys

H 8300 : 2021

Date of Establishment: 1971-05-01 Date of Revision: 2021-03-22 Date of Public Notice in Official Gazette: 2021-03-22 Investigated by: Japanese Industrial Standards Committee Standards Board for ISO area

JIS H 8300 : 2021, First English edition published in 2022-02

Translated and published by: Japanese Standards Association Mita MT Building, 3-13-12, Mita, Minato-ku, Tokyo, 108-0073 JAPAN

> In the event of any doubts arising as to the contents, the original JIS is to be the final authority.

© JSA 2022

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

Printed in Japan

HT/HN

Contents

Page

| Introd | luction | | |
|--|--|--|--|
| 1 | Scope1 | | |
| 2 | Normative references ······1 | | |
| 3 | Terms and definitions2 | | |
| 4 | Types and symbols | | |
| $5 \\ 5.1 \\ 5.2 \\ 5.3 \\ 5.4 \\ 5.5$ | Specifications of protective coating system3Specifications3Types of thermal spray material3Selection of thermal spray material4Supervision of thermal spray material4Selection of minimum local thickness4 | | |
| $\begin{array}{c} 6 \\ 6.1 \\ 6.2 \\ 6.3 \\ 6.4 \\ 6.5 \\ 6.6 \end{array}$ | Manufacturing pr Manufacturing su Blasting Thermal spraying Sealing Safety and hygier Tests | rocess 5 upervision 5 g 7 he measures 8 | |
| 7 7.1 7.2 7.3 | Quality9Minimum local thickness9Appearance9Adhesion9 | | |
| 8 8.1 8.2 8.3 | Test methods 9 Coating thickness measurement 9 Appearance test 10 Adhesion test 10 | | |
| 9 | Marking | | |
| Annex | x A (informative) | Table of environment corrosivity categories ······11 | |
| Annex | x B (informative) | Characteristics and corrosion behaviour of thermal spray materials of zinc, aluminium and their alloys13 | |
| Annex C (informative) | | Recommended values for the thickness of thermal spray coating | |
| Annex D (informative) | | Details of thermal spraying16 | |

| Annex E (informative) | Further details for sealing ·····24 |
|------------------------|--|
| Annex F (normative) A | dhesion test methods ······25 |
| Annex JA (informative) | Location and number of measurement points for coating thickness measurement |
| Annex JB (informative) | Comparison table between JIS and corresponding International Standards |

Foreword

This Japanese Industrial Standard has been revised by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee as the result of proposal for revision of Japanese Industrial Standard submitted by The Japan Thermal Spray Society (JTSS)/Japanese Standards Association (JSA) with a draft being attached, based on the provision of Article 12, paragraph (1) of the Industrial Standardization Act applied mutatis mutandis pursuant to the provision of Article 16 of the said Act. This edition replaces the previous edition (JIS H 8300:2011), which has been technically revised.

However, **JIS H 8300**: 2011 may be applied in the **JIS** mark certification based on the relevant provisions of Article 30, paragraph (1), etc. of the Industrial Standardization Act until 21 September 2021.

This **JIS** document is protected by the Copyright Act.

Attention is drawn to the possibility that some parts of this Standard may conflict with patent rights, published patent application or utility model rights. The relevant Minister and the Japanese Industrial Standards Committee are not responsible for identifying any of such patent rights, published patent application or utility model rights.

Blank

Thermal spraying — Zinc, aluminium and their alloys

Introduction

This Japanese Industrial Standard has been prepared based on **ISO 2063-1** : 2019, Edition 2, and **ISO 2063-2** : 2017, Edition 1, with some modifications of the technical contents.

The vertical lines on both sides and dotted underlines indicate changes from the corresponding International Standard. A list of modifications with the explanations is given in Annex JB.

1 Scope

This Standard specifies requirements for the thermal spray coating of zinc, aluminium and their alloys applied on steel surface for the purpose of corrosion protection.

NOTE The International Standards corresponding to this Standard and the symbol of degree of correspondence are as follows.

ISO 2063-1 : 2019 Thermal spraying — Zinc, aluminium and their alloys — Part 1 : Design considerations and quality requirements for corrosion protection systems

ISO 2063-2: 2017 Thermal spraying — Zinc, aluminium and their alloys — Part 2: Execution of corrosion protection systems (Overall evaluation: MOD)

In addition, symbols which denote the degree of correspondence in the contents between the relevant International Standards and **JIS** are IDT (identical), MOD (modified), and NEQ (not equivalent) according to **ISO/IEC Guide 21-1**.

2 Normative references

Part or all of the provisions of the following standards, through reference in this text, constitute provisions of this Standard. The most recent editions of the standards (including amendments) indicated below shall be applied.

JIS G 4404 Alloy tool steels

JIS H 8200 Thermal spraying terms

JIS H 8250 Graphical symbol for thermal spraying

JIS H 8261 Wires, rods and cords for flame and arc thermal spraying

JIS H 8401 Methods of thickness measurement for sprayed coatings

JIS H 8402 Test methods of tensile adhesive strength for thermal-sprayed coatings

JIS Z 0311 Metallic blast-cleaning abrasives

JIS Z 0312 Non-metallic blast-cleaning abrasives