

Thermal spraying — Metallic and other inorganic coatings — Zinc, aluminium and their alloys

The European Standard EN ISO 2063:2005 has the status of a
British Standard

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National foreword

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The UK participation in its preparation was entrusted to Technical Committee STI/40, Thermally sprayed inorganic finishes, which has the responsibility to:

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Summary of pages

This document comprises a front cover, an inside front cover, the EN ISO title page, pages 2 to 18, an inside back cover and a back cover.

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English version

**Thermal spraying - Metallic and other inorganic coatings - Zinc,
aluminium and their alloys (ISO 2063:2005)**

Projection thermique - Revêtements métalliques et
inorganiques - Zinc, aluminium et alliages de ces métaux
(ISO 2063:2005)

Thermisches Spritzen - Metallische und andere
anorganische Schichten - Zink, Aluminium und ihre
Legierungen (ISO 2063:2005)

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Foreword

This document (EN ISO 2063:2005) has been prepared by Technical Committee CEN/TC 240 “Thermal spraying and thermally sprayed coatings”, the secretariat of which is held by DIN, in collaboration with Technical Committee ISO/TC 107 “Metallic and other inorganic coatings”.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by September 2005, and conflicting national standards shall be withdrawn at the latest by September 2005.

This document supersedes EN 22063:1993.

Annex A and B are informative.

Annex ZA is normative.

This document includes a Bibliography.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom

Introduction

Thermal-sprayed metallic coatings are produced by heating the coating metal to its molten stage and projecting it in a stream of gas onto the prepared surface to be coated.

It is essential that the purchaser specifies the coating metal or alloy and the thickness of the coating required: merely to ask for thermal metal spraying to be carried out in accordance with this standard, without this information, is insufficient.

It is essential that the design of the article is such that it may be coated properly.

1 Scope

This standard applies to thermal-sprayed metallic coatings for the protection of iron and steel against corrosion by applying zinc or aluminium or their alloys to uncoated surface to be protected.

This standard deals with characteristic properties and gives test methods for coatings obtained by the spraying of zinc and aluminium and their alloys for the general purpose of corrosion protection.

It gives firstly the definition, classification and symbols for these coatings in relation to their thickness.

It then deals with the preparation of surfaces, application of coatings and their characteristic properties: namely, thickness, appearance and adhesion.

Finally it gives test methods for checking these properties.

For other metals some of the provisions are valid and can be adopted by agreement between the interested parties.

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.

EN ISO 1463, *Metallic and oxide coatings — Measurement of coating thickness — Microscopical method* (ISO 1463:1982).

EN ISO 2064:2000, *Metallic and other inorganic coatings — Definitions and conventions concerning the measurement of thickness* (ISO 2064:1996).

EN ISO 2178, *Non-magnetic coatings on magnetic substrates — Measurement of coating thickness — Magnetic method* (ISO 2178:1982).

EN ISO 8501-1, *Preparation of steel substrates before application of paints and related products — Visual assessment of surface cleanliness — Part 1: Rust grades and preparation grades of uncoated steel substrates and of steel substrates after overall removal of previous coatings* (ISO 8501-1:1988).

EN ISO 11124-2, *Preparation of steel substrates before application of paints and related products — Specifications for metallic blast-cleaning abrasives — Part 2: Chilled-iron grit* (ISO 11124-2:1993).

EN ISO 11126-3, *Preparation of steel substrates before application of paints and related products — Specifications for non-metallic blast-cleaning abrasives — Part 3: Copper refinery slag* (ISO 11126-3:1993).

EN ISO 11126-4, *Preparation of steel substrates before application of paints and related products — Specifications for non-metallic blast-cleaning abrasives — Part 4: Coal furnace slag* (ISO 11126-4:1993).

EN ISO 11126-7, *Preparation of steel substrates before application of paints and related products — Specifications for non-metallic blast-cleaning abrasives — Part 7: Fused aluminium oxide* (ISO 11126-7:1995).

EN ISO 12944-1, *Paints and varnishes — Corrosion protection of steel structures by protective paint systems — Part 1: General introduction* (ISO 12944-1:1998).

EN ISO 12944-2, *Paints and varnishes — Corrosion protection of steel structures by protective paint systems — Part 2: Classification of environments* (ISO 12944-2:1998).

EN ISO 12944-3, *Paints and varnishes — Corrosion protection of steel structures by protective paint systems — Part 3: Design considerations* (ISO 12944-3:1998).