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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 9793-2012

**Thermal spraying -- Metallic and other inorganic coatings --
Zinc, aluminium and their alloys
(English Translation)**

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Foreword

This Standard is drafted in accordance with the rules given in GB/T 1.1-2009.

This Standard replaces GB/T 9793-1997 "Metallic and other inorganic coatings

- Thermal spraying - Zinc, aluminium and their alloys". Compared with GB/T

9793-1997, the main changes of this Standard are as follows:

- Update all reference documents;
- Delete some national standards and machinery industry standards cited in GB/T 9793-1997;
- Delete the explanation of "measurement surface", "reference surface" and "local thickness" in "Terms and definitions";
- Add two preparation abrasives, "copper refinery slag" and "coal furnace slag" in 6.1;
- Delete "Result interpretation" in annex A.1.4;
- Add part of annex A.2 "Tensile test".

This Standard, using translation method, is identical to ISO 2063:2005

"Thermal spraying - Metallic and other inorganic coatings - Zinc, aluminium and their alloys".

China's documents which have a consistent correspondence with the international documents normatively referenced in this Standard are given in annex NA.

This Standard has made the following editorial change:

- Add an informative annex NA, China's documents which have a consistent correspondence with the international documents normatively referenced in this Standard.

This Standard was proposed by China Machinery Industry Federation.

This Standard shall be under the jurisdiction of National Technical Committee

57 on Metallic and Non-metallic Coating of Standardization Administration of

China (SAC/TC 57).

Drafting organizations of this Standard: Wuhan Research Institute of Materials Protection, Jiangsu CUMT Dazheng Surface Engineering Technology Co., Ltd., CHECSC (Wuhan) Bridge and Tunnel Design and Research Institute Co., Ltd.

Thermal spraying - Metallic and other inorganic coatings - Zinc, aluminum and their alloys

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.

This Standard 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 documents are indispensable for the application of this document.

For the dated references, only the editions with the dates indicated are applicable to this document. For the undated references, the latest edition (including all the amendments) are applicable to this document.

ISO 1463 Metallic and oxide coatings - Measurement of coating thickness - Microscopical method

ISO 2064:1996 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 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

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