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Aluminum alloy powder for additive manufacturing

增材制造用铝合金粉

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting.

Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents.

This document was proposed by China Nonferrous Metals Industry Association.

This document was prepared by the National Technical Committee on Standardization of Nonferrous Metals (SAC/TC243) and the National Technical Committee on Standardization of Additive Manufacturing (SAC/TC562) jointly under the jurisdiction of the Commission.

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Aluminum Alloy Powders for Additive Manufacturing

1 Scope

This document specifies the product classification, technical requirements, test methods, inspection rules, marking, packaging, transportation, Storage, accompanying documents and order content.

This document is applicable to aluminum alloy powders for additive manufacturing prepared by inert gas atomization, plasma atomization and other methods.

2 Normative references

GB/T 1479.1

GB/T 1480

GB/T 1482

GB/T 4698.7

GB/T 5162

GB/T 5314

GB/T 19077

GB/T 20975

GB/T 35351

GB/T 39251

GB/T 41978

3 Terms and definitions

The terms and definitions defined in GB/T 35351, GB/T 39251 and the following apply to

this document.

3.1 [Source. GB/T 37406-2019, 3.2]

The average sphericity of all tested sample particles reflects the degree to which all particles are close to spherical.

4 Product Categories

The products are divided into three grades according to chemical composition, namely AlSi7Mg, AlSi10Mg and AlMgSiMnScZr; according to particle size range, they are divided into There are three categories, namely Class I, Class II and Class III. The categories and recommended uses of the products are shown in Table 1.