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Anodizing coating on titanium and titanium alloys

钛及钛合金阳极氧化膜

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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 is required.

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 is proposed by China Nonferrous Metals Industry Association.

This document is under the jurisdiction of the National Technical Committee on Standardization of Nonferrous Metals (SAC/TC 243).

This document was drafted by: Northwest Research Institute of Nonferrous Metals, Xi'an Sailon Additive Technology Co., Ltd., Xi'an Johnson New Materials Technology Co., Ltd.

Co., Ltd., Xi'an Taijin New Energy Technology Co., Ltd., and Baoti Group Co., Ltd.

The main drafters of this document are: Li Guangzhong, Wang Jianyong, Tan Ping, Wang Hui, Li Yaning, Mu Guolu, Guo Lei, Zhang Yuping, Shi Wen, Li Peinan.

Titanium and titanium alloy anodic oxide film

1 Scope

This document specifies the classification, technical requirements, test methods, inspection rules and marking, packaging, transportation, and other aspects of titanium and titanium alloy anodic oxide films.

Transport, storage, accompanying documents and order contents.

This document applies to anodic oxide films prepared on the surface of titanium and titanium alloy products using alkaline anodic oxidation or acidic anodic oxidation methods.

2 Normative references

GB/T 3620.1

GB/T 4340.1

GB/T 4957

GB/T 12967.1

GB/T 12967.6

GB/T 31563

GB/T 31838.4

3 Terms and Definitions

The following terms and definitions apply to this document.

3.1 Anodic coating

After anodizing, a dense, uniform and colorful covering layer (film layer) is formed on the surface of the substrate.

Note. The substrate in this document is titanium and titanium alloy, which is called titanium and titanium alloy anodic oxide film.

3.2 Anodizing coating product

Products with an anodic oxide film on the surface.

3.3 alkaline anodizing

Anodic oxidation in alkaline electrolyte.

3.4 acidity anodizing

Anodic oxidation in an acidic electrolyte.

4 Categories

4.1 Anodic oxide films are divided into alkaline anodizing and acidic anodizing according to the preparation method. The film layer codes and typical applications are shown in Table 1.