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

GB/T 42916-2023

**Identification marking of aluminium and aluminium alloy
products**

铝及铝合金产品标识

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part

1. Structure and Drafting Rules of Standardization Documents" Drafting. Please note that some content in this document may be subject to patents. The publisher of this document assumes no responsibility for identifying patents. This document is proposed by the China Nonferrous Metals Industry Association. This document is under the jurisdiction of the National Nonferrous Metals Standardization Technical Committee (SAC/TC243). This document was drafted by: Northeast Light Alloy Co., Ltd., Chongqing Guochuang Light Alloy Research Institute Co., Ltd., Southwest Aluminum (Group) Co., Ltd. Ltd., Commercial Aircraft Corporation of China Ltd. Shanghai Aircraft Design and Research Institute, Nonferrous Metals Technology and Economic Research Institute Co., Ltd. Division, Youyan Engineering Technology Research Institute Co., Ltd., Shandong Nanshan Aluminum Co., Ltd., Chinalco Ruimin Co., Ltd., Shenyang Aircraft Industry (Group) Co., Ltd., Northwest Aluminum Co., Ltd., China Academy of Launch Vehicle Technology, and Liaoning Zhongwang Group Co., Ltd. The main drafters of this document. Gao Xinyu, Cong Fuguan, Li Zhihui, Liu Wang, Teng Minghe, Li Hongping, Gu Liu, Hu Tianlong, Yao Ze, Lin Shanbin, Li Dongdong, Wang Shouye, Li Honglin, Gao Baoting. Aluminum and aluminum alloy product identification

1 Scope

China's national standard for the identification marking of aluminium and aluminium alloy products. Marking is what carries a product's identity after it leaves the mill, and for aluminium it has to survive processes that would remove most marks: the material is formed, machined, anodised, painted and welded, and the alloy and temper have to remain identifiable through as much of that as possible. The consequences of losing it are real. Aluminium alloys look identical, their properties differ by a factor of five, and the ones that can be welded and the ones that cannot are indistinguishable by eye - a heat treatable alloy welded as if it were a work hardening one loses most of its strength in the heat affected zone. The standard classifies the marking methods and fixes what must be shown, which is

the ordinary set: alloy, temper, dimensions, lot and manufacturer.

This document specifies the labeling classification, general requirements for aluminum and aluminum alloy product labeling, ingot labeling, plate labeling, strip labeling, and foil labeling. identification, pipe identification, bar identification, profile identification, wire identification and forging identification. This document applies to the marking of aluminum and aluminum alloy ingots, plates, strips, foils, tubes, bars, profiles, wires and forgings.

2 Normative reference documents

The contents of the following documents constitute essential provisions of this document through normative references in the text. Among them, the dated quotations For undated referenced documents, only the version corresponding to that date applies to this document; for undated referenced documents, the latest version (including all amendments) applies to this document.

GB/T 8005.1 Aluminum and aluminum alloy terminology Part

3 Terms and definitions

The terms and definitions defined in GB/T 8005.1 and the following apply to this document.

3.1 spotmarking A sign that marks a single set of information at a specific or appropriate location on the product.

3.2 continuousmarking A logo that repeatedly marks a single set of information at fixed intervals on the surface of the product.

Note. Inkjet coding is generally used for marking.

3.3 perimetermarking Continuous marking (3.2) around the product.

Note. Inkjet coding is generally used for marking.

3.4 nickmarking The end surface or end section of the product is marked using steel stamping, pneumatic marking or laser marking.

Note. Single point identification (3.1) is generally used.

3.5 inkjetmarking The marking is carried out by inkjet printer at the specified position of the product.

Note. Single point marking (3.1), continuous marking (3.2) or surrounding marking (3.3) are generally used.

3.6 labelmark labelmark Identification by labeling or hanging a sign at the end of the product or at a specified location.

Note. Single point identification (3.1) is generally used.