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

GB/T 14846-2014

Replacing GB/T 14846-2008

**Tolerances on the dimensions and form of aluminium and
aluminium alloy extruded profiles**

铝及铝合金挤压型材尺寸偏差

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Foreword

This standard was drafted in accordance with GB/T 1.1-2009 given rules. This standard replaces GB/T 14846-2008 "aluminum and aluminum alloy extrusion profiles size deviation", compared with the GB/T 14846-2008, Lord To technical changes are as follows:

--- Increased 3102,5049,6008,6110A, 6014,6360,6262,6262A, 6065,7108,7108A and 7021 a total of

12 Typical grades;

--- Original class I (soft alloy) profiles modified to I type material;

--- Original class II (hard alloy) profiles modify II type material;

--- The magnesium content in aluminum-magnesium alloy II type material increased from an average of not less than 3.0% to not less than 4.0%;

--- General level and high-precision indicators II type material deviation angles were tightened;

--- Of a width of 250mm ~ 300mmII types of high-precision material plane gap indicators were tightened. This standard by the national non-ferrous metals Standardization Technical Committee (SAC/TC243) centralized. This standard is drafted by: Limited Southwest Aluminum (Group) Co., Ltd., Technical and Economic Research Institute of Nonferrous Metals, the Northeast Light Alloy Ltd., aluminum Northwest Aluminum Branch, Guangdong Haomei Aluminum Co., Ltd., Zhejiang East light hi-Wire Co., Ltd., Guangdong Jianmei Aluminum Plant (Group) Co., Ltd. Participated in the drafting of this standard. Shandong Longkou Conglin Aluminum Co., Ltd. Shandong Yankuang Light Alloy Co., Ltd. Hing Fat aluminum (Chengdu) Co., Ltd. Guangya Aluminum Co., Ltd., Fujian Nanping Aluminum Co.,

Ltd., Fujian Minfa Aluminium Limited service, Jilin Midas Aluminum Co., Ltd., Sichuan Guanghan Samsung Aluminum Co., Ltd., Liaoning Zhongwang Group Co., Ltd., Guangdong Huachang Aluminum Co., Ltd., Guangdong aluminum Co., Ltd., Guangdong Feng Aluminum Co., Ltd. The main drafters of this standard. Lee Shui-shan, Geli Xin, high Xinyu, TRADITIONIS wins the preceding paragraph, Yang Chunmei Chen Qing, Zheng Zhirong, Dai Yue star, Wang Mingkun, alluvial, Chen Si, Wang orientation, Hujun Jiang, Chen, Wang Jiabin, SOCIETY FOR Li Honglin, sex Tang Ning, Cao expensive water, Li Xinyi. This standard replaces the standards previously issued as follows:

--- GB/T 14846-1993, GB/T 14846-2008. Aluminum and aluminum alloy extrusion profiles size deviation

1 Scope

China's national standard for the dimensional and form tolerances of extruded aluminium profiles - the sections from which window and curtain wall systems, structural framing, heat sinks, vehicle bodies and countless products are made. It specifies the tolerances on the dimensions and the form of aluminium and aluminium alloy extruded profiles. A tolerance standard is a strange document to read and an essential one to have, because the tolerance is what a profile actually is. An extrusion is drawn hot through a die and then cools, stretches and ages, and every one of those steps moves it: the section is never exactly what the drawing says, and the question is only by how much and in which direction. Without an agreed set of tolerances a profile drawing is not a specification at all, and the fabricator, the anodiser and the assembler who all handle it afterwards have nothing to work to. The standard sets them by category: the cross-sectional dimensions, distinguishing the wall thicknesses from the overall dimensions and treating separately the dimensions that span a hollow, which move more; the form tolerances - the straightness, the twist, the flatness of a surface, the angularity and the curvature - which are the ones that decide whether a length can be assembled at all; the length and the squareness of the cut end; and the tolerances that apply after a surface treatment, since anodising adds thickness and a profile toleranced bare will not fit after it is coated. The tolerances are graded, so that a purchaser can buy ordinary or precision as the application requires and pay accordingly - which is the practical use of the document. Issued on 5 December 2014 and in force since 1 May 2015, it replaces GB/T 14846-2008.

This standard specifies the aluminum and aluminum alloy extrusion profiles size deviation (including cross-sectional dimension deviation, surface space, space plane, bent Degrees, twist, cut slope, length deviation) requirements and testing methods. This standard applies to aluminum and aluminum alloy extrusion profiles.

2 Terms and definitions

The following terms and definitions apply to this document.

2.1 Circumcircle circumscribingcircle The smallest circle can be completely surrounded by the cross-sectional profile, as shown in Figure 1. figure 1 3 classification, grading

3.1 Classification profiles Aluminum and aluminum alloy extrusion press ingredients into two categories as shown in Table 1. Table 1 profiles category Do not grade system Profiles category I Class II Class Profiles typical grades I type material typical grade II type material typical grades 1 xxx all - 1050A, 1060,1100,1200,1350 - 2 xxx - all - 2A11,2A12,2017,2017A, 2014,2014A, 2024 3 xxx all - 3A21,3003,3102,3103 -