

ICS

H 61



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

中华人民共和国有色金属行业标准

YS/T 489-2005

Grain-refining aluminium ingots

结晶铝锭

Issued on September 23, 2005

Implemented on February 01, 2006

Issued by the National Development and Reform Commission

Contents

Foreword	1
Introduction	2
1 Scope	3
2 Normative References	3
3 Terms	3
4 Requirements	3
5 Quality control	4
6 Test methods	4
7 Inspection rules	5
8 Marking, packaging, transport and storage	5
9 The contents of the order form (or contract)	5
Annex A (Informative) Quality control requirements for grain-refining aluminum ingot production process	6
Annex B (Informative) Test method for grain refinement capacity of grain-refining aluminum ingot	7
Annex C (Informative) Grain refinement capacity of grain-refining aluminum ingots	9

Foreword

In this Standard, Annex A, Annex B and Annex C are informative annexes.

The Standard is proposed by and under jurisdiction of the National Nonferrous Metals Standardization Technical Committee.

The responsible unit for drafting this Standard is: Zhengzhou University

The Standard is drafted by Dengdian Group Aluminum alloy Co., Ltd., Northeast Light Alloy Co., Ltd., Aluminum Corporation of China Limited, Guizhou Branch and Jiaozuo Wanfang Aluminum Co., Ltd.

Main drafters of this Standard are: Zuo Xiurong, Liu Zhongxia, Zhang Jilin, Wu Xinfeng, Wang Mingxing, Xie Qi, Zeng Ping, Wang Mingxiu, Liu Zhiyong, Song Tianfu, Weng Yonggang.

National Nonferrous Metals Standardization Technical Committee is responsible for the interpretation of this Standard.

Grain-refining aluminum ingots

1 Scope

This Standard specifies the requirements, test methods, inspection rules, marking, packing, transport, storage and quality control of the grain-refining aluminum ingots.

This Standard applies to the grain-refining aluminum ingots produced by aluminum oxide - titanium oxide - cryolite molten salt electrolysis eutectoid method

2 Normative References

The articles contained in the following documents have become this standard when they are quoted herein. For the dated documents so quoted, all the modifications (excluding corrections) or revisions made thereafter shall not be applicable to this Standard. For the undated documents so quoted, the latest editions shall be applicable to this Standard.

GB/T 1196 Unalloyed aluminium ingots for remelting

GB/T 1706 Titanium dioxide pigments

GB/T 3246 (All parts) Inspection method for structure of wrought aluminum and aluminum alloy products

GB/T 8170 Rules of rounding off for numerical values & expression and judgement of limiting values

YS/T 298 High titanium slag

YS/T 299 Artificial rutile

YS/T 322 Specification for aluminium alloys webster hardness

YS/T 352 Natural rutile concentration

3 Terms

Grain-refining aluminum ingots

The aluminum ingot produced in electrolytic process by adding the titanium oxide into the electrolyte is called grain-refining aluminum ingots. Among which the mass fraction of titanium is not more than 0.20%; the average grain diameter of the grain is not more than 350 μ m via the grain refinement capacity test.

4 Requirements

4.1 Product category

Grain-refining aluminum ingots are divided into four grades according to the chemical composition: XA199.70A, XA199.70A-2, XA199.70A-3, XA199.70A-4.

4.2 Chemical composition

The chemical composition of the grain-refining aluminum ingots shall comply with the provisions of Table 1.

4.3 Appearance

Appearance of the grain-refining aluminum ingots shall be conducted according to the provisions of GB/T 1196.

4.4 Ingot weight and ingot mold

Ingot weight and ingot mold of grain-refining aluminum ingot shall be conducted according to the provisions of GB/T 1196.

完整版本请在线下单

或咨询：

TEL: 400-678-1309

QQ: 19315219

Email: info@lancarver.com

<http://www.lancarver.com>

线下付款方式：

1. 对公账户：

单位名称：北京文心雕语翻译有限公司

开户行：中国工商银行北京清河镇支行

账 号：0200 1486 0900 0006 131

2. 支付宝账户：info@lancarver.com

注：付款成功后，请预留电邮，完整版本将在一个工作日内通过电子 PDF 或 Word 形式发送至您的预留邮箱，如需索取发票，下单成功后的三个工作日内安排开具并寄出，预祝合作愉快！



银联特约商户