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

GB/T 4135-2016

Silver ingots

银锭

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Foreword

This standard is drafted in accordance with the rules given in GB/T 1.1-2009. This standard replaces GB/T 4135-2002 "silver". Compared with GB/T 4135-2002, this standard has been modified as follows:

- change the standard name to "silver ingot";
- delete GB/T 4315-2002 in the granular silver and rod-like silver content;
- 99.99 grade Cu impurity content requirements from 0.003% to 0.0025%;
- 99.99 grade Te content modified to no more than 0.0008%;
- Delete GB/T 4315-2002 Table 1 "

Note 2. lead system recovery silver IC-Ag

- 99.99 grades in the bismuth mass fraction can not be large At 0.001% ";
- silver ingot physical specifications to increase the appearance of the size and weight requirements and weight requirements;
- ingot physical specifications of the ingot weight from the four specifications modified to two specifications (15kg, 30kg); - the content of the test method has been modified and in the test method to add the silver ingot size detection equipment requirements;

3.4.2 modified as. 30kg silver ingot top pit deep should not be greater than 12mm. This standard is proposed by China Nonferrous Metals Industry Association. This standard is owned by the National Committee for the Standardization of Nonferrous Metals (SAC/TC243). This standard is responsible for drafting units. Jiangxi Copper Co., Ltd., Henan Yuguang Gold Lead Co., Ltd., Yunnan Copper Co., Ltd. Division, Nonferrous Metals Technology and Economic Research Institute, Shandong Zhaojin Gold and Silver Refining Co., Ltd., Chenzhou Jinguui Silver Industry Co., Ltd. This standard participates in the

drafting unit. Yanggu Xiangguang Copper Co., Ltd., Zijin Mining Group Co., Ltd., Green America Co., Ltd., Daye Nonferrous Metals Co., Ltd., Sichuan Tianze precious metals limited liability company, the Bank of China Great Wall Precious Metals Co., Ltd. The main drafters of this standard. Wang Feihu, Li Lili, Yan Hong, Xiang Lei, Zhang Mianhui, Liu Wanli, Chen Yingwu, Liang Chunlai, Li Zhizhi, Li Wei, Study on the Effects of Different Kinds of Nitrogen, Phosphorus, Potassium, Phosphoric Acid, Xie Tai - li, Li Xiao - hui, Wu Rongjun, Wang Qiuxia, Wu Zhiqing. This standard replaced the previous version of the standard release. GB/T 4135-1994, GB/T 4135-2002. Silver ingot

1 Scope

China's national standard for silver ingots. It specifies the requirements, the test methods, the inspection rules and the marking, packaging, transport and storage. Silver occupies an awkward position between a precious metal and an industrial one, and the standard has to serve both. As a precious metal it is traded and stored on its assay, with the same requirements for fineness, marking and traceability as gold. As an industrial metal it is consumed in quantity for electrical contacts, brazing alloys, photovoltaic paste and catalysts, and there the impurities matter for what they do rather than for what they are worth - a few parts per million of the wrong element changes the conductivity, the wetting behaviour or the catalytic activity. Most of the world's silver is a by-product of mining lead, zinc and copper rather than the object of its own mines, so the impurity profile of a refinery's output reflects the ores it treats.

This standard specifies the requirements, test methods, inspection rules, marking, packaging, transportation, storage and quality certificates, orders (or Equal). This standard applies to silver ingots produced from various silver-containing raw materials. The product is mainly used for electronic materials, photographic materials, jewelry and gold Financial fields and so on.

2 Normative reference documents

The following documents are indispensable for the application of this document. For dated references, only the dated edition applies to this article Pieces. For undated references, the latest edition (including all modifications) applies to this document. Representation and Judgment of Numerical Correction Rule and Limit Value of GB/T 8170

GB/T 11067 (all parts) Silver chemical analysis method

3 Request

3.1 Product Classification The silver ingot is divided into three grades according to the chemical composition. IC-Ag99.99, IC-Ag99.95, IC-Ag99.90.

3.2 Chemical composition

3.2.1 The chemical composition of silver ingot shall comply with the provisions of Table 1.
Table

1 Grade chemical composition/% Silver content (Mass fraction) not less than Impurity content (mass fraction), no more than Cu Pb Fe Sb Se Te Bi Pd impurity IC-Ag99.99 99.99 0.0025 0.001 0.001 0.001 0.0005 0.0008 0.0008 0.001

0.01 IC - Ag 99.95 99.95 0.025 0.015 0.002 0.002 - - 0.001 -

0.05 IC-Ag 99.90 99.90 0.05 0.025 0.002 - - - 0.002 - 0.10

3.2.2 IC-Ag

99.95 grades, silver mass fraction determined by impurity reduction method, the required impurity elements including but not limited The impurity elements listed in Table 1. IC-Ag

99.90 grade silver mass fraction is measured directly.

3.2.3 demand side of the chemical composition of silver ingots have special requirements, the supply and demand sides can be determined through consultation.

3.3 Physical specifications

3.3.1 silver ingot was rectangular ingot, trapezoidal ingot.