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

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Platinum ingots

铂锭

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1 Scope

China's national standard for platinum ingots. It specifies the test methods, the inspection rules, the marking, packaging, transport and storage, the quality certificate and the order or contract content, and it applies to ingots produced from platinum-bearing raw material. Platinum is a commodity in the strict sense: it is traded on the international market against a specification, and an ingot that meets the standard is interchangeable with any other. That is why the standard's provisions on marking, certification and the order form matter as much as its purity requirements - the ingot is a financial instrument as well as a metal, and its assay, its serial number and its producer's mark are what allow it to be accepted without being retested. Most of the world's platinum is used in autocatalysts, in chemical and petroleum refining catalysis, and in laboratory ware, and each of those depends on purity: platinum works catalytically through its surface, and an impurity that segregates there

poisons it.

This Standard specifies product classification, technical requirements, test methods, inspection rules, marking, package, transportation, storage, quality certificate, and ordering form (or contract) contents of platinum ingots. This Standard is applicable to the platinum ingots produced by the platinum-contained raw materials.

2 Normative References

The following documents are essential to the application of this document. For the dated documents, only the versions with the dates indicated are applicable to this document; for the undated documents, only the latest version (including all the amendments) are applicable to this document.

GB/T 1419-2015 Sponge Platinum

GB/T 8170 Rules of Rounding off for Numerical Values & Expression and Judgement of Limiting Values

GB/T 18035 Precious Metals and its Alloys Designation System YS/T 361 Determination of Trace Impurities in Purity Platinum by Atomic Emission Spectrometric

3 Product Classification

According to the provisions of expression method specified in GB/T 18035, the platinum ingot is divided into three designations as per the chemical composition of platinum: IC-Pt99.99, IC-Pt99.95, and IC-Pt99.9.

6.5 Judgment of the inspection results

6.5.1 The actually-measured value of the impurity element shall be rounded off to 3 significant figures after the decimal points according to GB/T 8170; it shall be expressed by the maximum limit value.

6.5.2 If the chemical composition is unqualified, such batch of products shall be judged to be unqualified.

6.5.3 If the appearance quality is unqualified, then such block of platinum ingot shall be judged to be unqualified.

6.4.4 When the weight or dimension are deviated, it shall not serve as the basis for judging whether it is qualified or not.

7 Marking, Package, Transportation, Storage and Quality Certificate

7.1 Marking

The surface of each block of platinum ingot shall be cast or printed with batch number, weight, trademark, and designation, etc.

7.2 Package Each block of platinum ingot shall be wrapped by clean paper or plastic film; then packed into the wooden or plastic boxes.

--- The End ---

9 Figure 1 - Schematic Diagram of Sampling Points for Single Ingot

6.4.3 Use a 5mm~8mm drill bit to drill the platinum ingot; the drilling depth shall be no less than $\frac{2}{3}$ for the ingot thickness. After conducting the magnet treatment against the drilled specimen, mix it evenly. Reduce it into 6 parts by quartering; each part is no less than 2g.

6.4.4 In order to avoid the surface contamination of the sample, before analyzing the sample, use 45°C~55°C hot hydrochloric acid (1+1) to immerse for 5min~10min. After washing by water, rinse with alcohol or acetone twice and dry in an oven at 105°C~110°C.