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

GB/T 6730.90-2025

**Iron ores - Determination of gold, silver, platinum, palladium
contents - Inductively coupled plasma mass spectrometry
method**

铁矿石 金、银、铂、钯含量的测定 电感耦合等离子体质谱法

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting.

This document is Part 90 of GB/T 6730. For the published parts of GB/T 6730, see Appendix A.

Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents.

This document was proposed by the China Iron and Steel Association.

This document is under the jurisdiction of the National Iron Ore and Direct Reduced Iron Standardization Technical Committee (SAC/TC317).

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Introduction

Iron ore is the main raw material for the steel industry. In the standard system of the steel industry, the standard system for determination of chemical composition of iron ore is one of the most important standards.

It is a very important part of the production process and plays an important role in ensuring the quality of iron ore products. This series of methods and standards serve the production of iron ore.

production, trade and application, providing technical support for the high-quality development of China's steel industry.

GB/T 6730 includes a series of standards for the determination of chemical composition of iron ore, which respectively stipulates the content of moisture, total iron, metal iron, ferrous iron, silicon, aluminum, calcium, magnesium, sulfur, phosphorus, manganese, titanium, total rare earth, barium, chromium, vanadium, tin, copper, cobalt, nickel, zinc, niobium, bismuth, potassium, sodium, carbon, lead, arsenic, Determination methods for chemical components such as cadmium, mercury, fluorine, chlorine, loss on ignition and combined water.

In 1986, GB/T 6730 first issued 51 national standards for the determination of chemical composition of iron ore.

In line with the development of technology and actual production needs, after years of continuous formulation and revision, a relatively complete standard system has been formed.

For details of the GB/T 6730 constituent documents, please see Appendix A.

Determination of gold, silver, platinum and palladium content in iron ore Inductively Coupled Plasma Mass Spectrometry Warning---People who use this document should have practical experience in formal laboratory work. This document does not address all possible safety issues.

The user is responsible for taking appropriate safety and health measures and ensuring compliance with the conditions stipulated in relevant national laws and regulations.

1 Scope

This document describes a method for the determination of gold, silver, platinum and palladium in iron ore by inductively coupled plasma mass spectrometry.

This document is applicable to the determination of gold, silver, platinum and palladium content in iron ore. The determination range is shown in Table 1. Table 1 Measurement range The unit is milligrams per kilogram Element determination range Gold 0.010~3.00 Silver 0.010~30.00 Platinum 0.0050~12.00 Palladium 0.0050~2.00

2 Normative references

GB/T 602

GB/T 6379.1

GB/T 6379.2

GB/T 6682

GB/T 6730.1

GB/T 8170

GB/T 10322.1

GB/T 12806

3 Terms and definitions

There are no terms or definitions that require definition in this document.