

ICS 77.120.01
CCS H 60

YS

**NONFERROUS METALS INDUSTRY STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

YS/T 441.3-2014

Replacing YS/T 441.3-2001

**Management rules of nonferrous metals balance. Part 3: Zinc
enrichment and metallurgy
(English Translation)**

Issued on: October 14, 2014

Implemented on: April 1, 2015

Issued by: Ministry of Industry and Information Technology

Table of Contents

- Foreword
- 1 Scope
- 2 Normative references
- 3 Terms and Definitions
- 3.1 Mineral Processing Section

Foreword

YS/T 441-2014 "non-ferrous metal balance management practices" is divided into five sections.

- Part 1. Copper smelting mineral processing;
- Part 2. lead smelting mineral processing;
- Part 3. zinc smelting mineral processing;
- Part 4. tin smelting mineral processing;
- Part 5. gold, silver smelting.

This section is YS/T Part 3 441.

This section drafted in accordance with GB/T 1.1-2009 given rules.

The partial replacement of YS/T 441.3-2001 "balance of non-ferrous metal smelting management practices zinc mineral processing part." This portion of YS/T 441.3-2001 "balance of non-ferrous metal smelting management practices zinc beneficiation section" compared to the main changes are as follows.

- Zinc, hot-dip zinc alloy ingot casting sampling, sample preparation and analysis of zinc alloy ingots increased by GB/T 26043 and GB/T 26042 requirements method;
- Terminology and definitions were perfect, the definition of ore beneficiation part of the increase, concentrates, tailings, the ore; and increased smelting section Defined step recovery, metallurgical recoveries, the total recovery rate of smelt;
- The ore grade, ore grade, grade tailings and other indicators calculated column in "5.4.2 Calculation Method";
- Smelting part of the metal content and balance calculations were complements, increasing the difference on recovered material in different situations Treatment instructions;

- Of "stewardship" relevant content has been simplified;
- On the "inventory method" in the "field measurements" for the appropriate changes;
- Further improve the material beneficiation flow chart;
- Zinc smelting process and further improve the material flow chart;
- According to the actual production of the format and content of Appendix A balance sheet metal were perfect for smelting companies can choose to take the table A.2 format, you can also choose to take a table A.3 and Table A.4 format.

The non-ferrous metal part by the National Standardization Technical Committee (SAC/TC243) centralized.

This section is responsible for drafting units. China Nonferrous Metals Industry Standards and Metrology Institute for Quality.

This section is drafted. Huludao Zinc Industry Co., Ltd.

Participated in the drafting of this section. Henan Yuguang Zinc Industry Co., Jiangxi Copper Company Limited, Baiyin Nonferrous Group Co. Shares the company.

1 Scope

This section YS/T 441 specifies the portion of the metal smelting zinc beneficiation balance standardized terminology management, responsibilities, metal balance calculation public Type, method of preparation and the balance sheet metal formats.

This section applies to zinc and its subsidiary products beneficiation smelting enterprises.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document.

GB/T 470 zinc

GB/T 3185 zinc oxide (indirect method) Zinc oxide GB/T 3494 direct method GB/T 6890 Zinc GB/T 8151 (all parts) Methods for chemical analysis of zinc concentrates GB/T 8738 zinc alloy ingot casting GB/T 12689 (all parts) of zinc and zinc alloys -GB/T 14260 heavy nonferrous metals flotation concentrates in bulk sampling and sample preparation General GB/T 14261 bulk flotation zinc concentrates sampling and sample preparation method GB/T 26042 and zinc alloys photoelectric reflectance spectroscopy analysis GB/T 26043 zinc and zinc alloy sampling and sample preparation method YS/T 53 (all parts) of copper, lead, zinc ore tailings and chemical analysis methods YS/T 310 hot-dip zinc alloy ingots YS/T 320 zinc concentrate

3 Terms and Definitions

The following terms and definitions apply to this document.

3.1 Mineral Processing Section

3.1.1

Ore rawminerals

Sent from stope ore dressing plant, concentrator also includes access to other materials processing.

3.1.2

Ore concentrates

After the ore or raw material sorting, useful components enriched products.