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

GB/T 44057-2024

**Technical requirements of operation performance assessment
for recovering secondary zinc oxide by rotary kiln**

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Foreword

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oxide skills requirement

1 Scope

GB/T 44057-2024 sets the technical requirements for assessing how well a rotary kiln recovering secondary zinc oxide actually performs. The kilns treat electric arc furnace dust and zinc-bearing residues, volatilising the zinc and collecting it as crude oxide; China operates a great many of them, of widely varying vintage, and they sit exactly where industrial policy is tightest, being simultaneously a resource recovery operation and a significant consumer of coal and emitter of dust. The standard sets the general principles, the assessment requirements, the assessment methods and the assessment report, with normative annexes giving the scoring tables for comprehensive energy consumption per unit of raw material, for the comprehensive resource utilisation rate and for the intensity of land use, and an informative annex giving the basic information table for the kiln equipment. It took effect on 1 December 2024.

This document specifies the general principles, evaluation requirements, evaluation methods and evaluation report for the evaluation of the operating performance of rotary kiln equipment for recovering secondary zinc oxide: This document is applicable to the evaluation of the operating performance of equipment for recovering secondary zinc oxide by using rotary kiln to treat zinc-containing solid waste:

2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document: For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to This document:

GB/T 2589 General rules for calculation of comprehensive energy consumption GB 5085:

3 Identification Standard for Hazardous Wastes - Identification of Leaching Toxicity

GB 18597 Hazardous waste storage pollution control standard

GB 18599 Pollution control standard for storage and landfill of general industrial solid waste

GB/T 19001 Quality Management System Requirements

GB/T 23331 Energy Management System Requirements and Usage Guide

GB/T 24001 Environmental Management System Requirements and Usage Guide

GB/T 28001 Occupational health and safety management system requirements and usage guidelines

GB/T 28292 Technical specification for recovery and utilization of iron-containing dust and sludge in the iron and steel industry

GB/T 32818 Terminology of smelting equipment YS/T 1403 Green Factory Evaluation Guidelines for Nonferrous Metal Smelting Industry

3 Terms and definitions

The terms and definitions defined in GB/T 28292, GB/T 32818 and the following apply to this document: 3:1 A general term for zinc-containing hazardous wastes generated by the non-ferrous metal smelting industry and zinc-containing steel dust and sludge generated by the steel industry: 3:

2 The waste codes in the National List of Hazardous Wastes (2021 Edition) are 321-003-48, 321-004-48, 321-005-48, 321-007-48, Hazardous wastes 321-008-48, 321-009-48, 321-011-48, 321-012-48 and 321-028-48: 3:

3 Zinc-containing smoke, dust, and sludge are obtained by dry and wet dust removal during sintering, pelletizing, ironmaking, and steelmaking processes: