

ICS 13.100
CCS H09



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

GB 29741-2025

Replacing GB 29741-2013

Safety specification for aluminum electrolysis

铝电解安全生产规范

Issued on: August 1, 2025

Implemented on: February 1, 2026

**Issued by: State Administration for Market Regulation;
Standardization Administration of China**

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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 replaces GB 29741-2013 "Safety Production Specifications for Aluminum Electrolysis". Compared with GB 29741-2013, except for the structural adjustment and editing In addition to the functional changes, the main technical changes are as follows:

--- Added terms such as "aluminum electrolysis", "roasting", "anode effect", "electrolytic cell overhaul", "ingot" and their definitions (see Chapter 3);

--- Changed the safety requirements for site selection, plant layout and buildings (structures) (see Chapter 5,.2013 edition, 3.1.1, 3.1.2, 3.1.3, 3.1.4);

--- Changed the safety requirements for aluminum electrolysis (see 6.3,

4.1 of the.2013 edition);

--- Added safety requirements for electrolytic cell overhaul (see 6.4);

--- Added safety requirements for anode assembly (see 6.5);

--- Changed the safety requirements for ingots (see 6.6,

4.3 of the.2013 edition);

--- Changed the safety requirements for flue gas cleaning (see 6.7,

--- Added safety requirements for flue gas desulfurization (see 6.8);

--- Changed the safety requirements for transportation (see 6.9,

5.2 of the.2013 edition);

1 Scope

GB 29741-2025 is the Chinese national standard on safety specification for aluminum electrolysis, in the field of environment and health protection, safety. It carries no /T suffix, which in the Chinese system means compliance is mandatory: a product or a practice within its scope has to meet it to be lawfully made, sold or carried out in China. It was issued on 1 August 2025 by the State Administration for Market Regulation; Standardization Administration of China, and has been in force since 1 February 2026. Classification: ICS 13.100, CCS H09. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This document specifies the safety management, site selection, plant layout and construction (structure), production, inspection and maintenance of aluminum electrolysis production. Requirements, describing the verification method. This document is applicable to the plant design, aluminum electrolysis, electrolytic cell overhaul, anode assembly, ingot casting, flue gas purification, flue gas desulfurization, Safety management of transportation, power systems, inspection and maintenance.

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 2894 Safety colors and safety signs

GB 4053.1 Safety requirements for fixed steel ladders and platforms Part

3 Terms and Definitions

The following terms and definitions apply to this document.

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