

ICS 13.100
CCS C 72



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

GB 17750-2025

Replacing GB 17750-2012

Safety specification for dipping coating

浸漆涂装安全规范

Issued on: December 31, 2025

Implemented on: October 1, 2026

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

Table of Contents

1.Scope	1
2 Normative References	1
3.Terms and Definitions	1
4.General Requirements	2
5.Dip coating equipment	2
6 Electrical and Automatic Control	4
7.Ventilation System and Exhaust Gas Treatment.....	4
8.Coating storage and transportation	5
9.Operation and Maintenance	5
6 References	8

Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part

1.Structure and Drafting Rules of Standardization Documents". Drafting. This document replaces GB 17750-2012 "Safety Regulations for Coating Operations - Safety of Dip Coating Process". Compared with GB 17750-2012, except for the following. Aside from structural adjustments and editorial changes, the main technical changes are as follows:

- a) The scope of application has been changed; the scope of reference has been removed, and the scope of inapplicability has been added (see Chapter 1,.2012 edition). Chapter 1);
- b) The term "electromagnetic wire impregnation" and its definition have been added (see 3.4);
- c) The definition of the term "immersion vapor source" has been changed (see 3.6, 3.5 in the.2012 edition);
- d) The extent of the dip coating area has been changed (see 4.1,.2012 version 4.1);
- e) The requirements for the dip coating tank body, inlet, overflow pipe, and bottom discharge device have been changed (see 5.1.2, 5.1.3, 5.1.5,.2012). Versions 5.1.2, 5.1.3, and 5.1.4);
- f) The minimum size requirement for exhaust pipes has been removed (see 5.1.4.3 in the.2012 edition);

- g) The requirement for setting up drainage ditches around the bottom of the tank has been added (see 5.1.6);
- h) The requirements for bath solution management have been changed (see 5.1.7, 5.1.5 in the 2012 version);
- i) The requirements for paint tank volume have been changed (see 5.2.1, 2012 version 5.2.1);

1 Scope

GB 17750-2025 is the Chinese national standard on safety specification for dipping coating, 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 31 December 2025 by the State Administration for Market Regulation; Standardization Administration of China, and takes effect on 1 October 2026. Classification: ICS 13.100, CCS C 72. 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 general requirements for safe production in dip coating, including dip coating equipment, electrical and automatic control systems, ventilation systems and exhaust gas treatment, and coating... Safety technical requirements for material storage and transportation, operation and maintenance, etc., are described, and verification methods are presented. This document applies to the design, manufacture, installation, acceptance, and use of equipment for dip coating processes using flammable or combustible liquid coatings. This document does not apply to electrophoretic coatings using liquid paints.

2 Normative references

The contents of the following documents, through normative references herein, constitute essential provisions of this document. (

Note. Date-based references are not included.) For this document, only the version corresponding to the specified date applies; for undated references, the latest version (including all amendments) applies. In this document.

GB 5083 General Principles for Safety and Health Design of Production Equipment

GB 6514 Safety Regulations for Painting Operations. Safety of Painting Processes and Ventilation

GB 11341 Safety Regulations for Overhead Conveyors

GB 12158 General requirements for the prevention of electrostatic discharge accidents

GB/T 14441 Safety Terminology for Painting Operations

GB 14443 Safety Technical Requirements for Coating Drying Chambers

GB 16297 Integrated Emission Standard for Air Pollutants GB.20101 Safety Technical Requirements for Organic Waste Gas Purification Devices in Coating Industry

GB 37822 Standard for the Control of Fugitive Emissions of Volatile Organic Compounds

GB 39800.1 Specifications for the Configuration of Personal Protective Equipment Part

3 Terms and Definitions

The terms and definitions defined in GB/T 14441 and the following terms and definitions apply to this document.

3.1 Dipping coating Dip coating The process of immersing a workpiece in a coating, covering the surface of the workpiece with the coating, removing it, and removing excess coating.

3.2 diptank A tank containing coatings that can be used for dip coating of workpieces and has safety protection functions.