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

GB/T 46600-2025

**Thermal spraying - Thermally sprayed coatings - Symbolic
representation on drawings**

热喷涂 热喷涂涂层 图纸上的符号表示

(English Translation)

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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 is modified to adopt ISO 12671:2021 "Thermal spraying - Symbol representation on thermal spraying coating drawings".

The technical differences between this document and ISO 12671:2021, and the reasons therefor, are as follows.

---The scope of application has been expanded (see Chapter 1) to adapt to my country's technological conditions;

---The auxiliary verb "should" has been changed to "appropriate" (see Chapter 6) to increase operability and facilitate the application of this document;

---The naming rules for powder coating materials and filaments have been changed (see Chapter 7) to increase operability.

The following editorial changes have been made to this document.

--- Replace ISO 14917 in the note with GB/T 18719.

Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents.

This document was proposed by the China Machinery Industry Federation.

This document is under the jurisdiction of the National Technical Committee on Standardization of Metallic and Non-metallic Coatings (SAC/TC57).

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1 Scope

This document specifies the basic requirements for the representation of thermal spray coating symbols on drawings.

This document is intended for use by thermal spraying technicians when drawing engineering drawings for components containing thermal spray coatings.

2 Normative references

The contents of the following documents, through normative reference in this document, 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/T 12608-2003 Classification and Technical Conditions for Supply of Wires, Rods and Cores for Thermal Spraying (Flame and Arc Spraying) (ISO 14919:2001, MOD) GB/T 19356-2003 Composition and Technical Conditions for Supply of Thermal Spray Powder (ISO 14232:2000, MOD)

3 Terms and Definitions

This document does not contain any terms or definitions that need to be defined.

4 General Rules

Coatings can be indicated on technical drawings as generally recommended. This is especially important when the thermal spray coating is very thin and/or consists of multiple layers of different coatings.

In such cases, the symbols described in this document may be used.

Symbols should clearly indicate all necessary markings for the sprayed coating, rather than adding excessive annotations, additional views, or details to the drawings.

Large image.

A symbol representation includes a basic symbol, one or more additional symbols, and further supplementary explanations.

If extensive coating manufacturing instructions are required, it is advisable to provide detailed specifications on the drawings, or, where applicable, in a separate parts list.

The explanation is as follows (see Figures 6 and 7).

5 Symbol

The basic symbols should indicate that the process is a thermal spraying process.

Additional symbols should provide the following information.

---Coating type (base coat or top coat);

---Spraying process and subsequent treatment.

The following requirements can be specified in further supplementary instructions.

---Required coating thickness or final coating thickness after machining;

---The thermal spraying material to be used;