

Thermal spraying - Thermally sprayed coatings -  
Symbolic representation on drawings (ISO  
12671:2021)

## EESTI STANDARDI EESSÕNA

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See Eesti standard EVS-EN ISO 12671:2021 sisaldab Euroopa standardi EN ISO 12671:2021 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 12671:2021 consists of the English text of the European standard EN ISO 12671:2021.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.
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English Version

## Thermal spraying - Thermally sprayed coatings - Symbolic representation on drawings (ISO 12671:2021)

Projection thermique - Revêtements appliqués par projection thermique - Représentation symbolique sur les dessins (ISO 12671:2021)

Thermisches Spritzen - Thermisch gespritzte Schichten - Symbolische Darstellung in Zeichnungen (ISO 12671:2021)

This European Standard was approved by CEN on 20 February 2021.

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EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

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## European foreword

This document (EN ISO 12671:2021) has been prepared by Technical Committee ISO/TC 107 "Metallic and other inorganic coatings" in collaboration with Technical Committee CEN/TC 240 "Thermal spraying and thermally sprayed coatings" the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by October 2021, and conflicting national standards shall be withdrawn at the latest by October 2021.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN ISO 12671:2014.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

## Endorsement notice

The text of ISO 12671:2021 has been approved by CEN as EN ISO 12671:2021 without any modification.

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## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 107, *Metallic and other inorganic coatings*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 240, *Thermal spraying and thermally sprayed coatings*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This second edition cancels and replaces the first edition (ISO 12671:2012), which has been technically revised. The main changes compared with the previous edition are as follows:

- the designation examples and figures have been updated in accordance with the latest thermal spray terminology and material standards (see ISO 14917, ISO 14919 and ISO 14232-1).

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).

# Thermal spraying — Thermally sprayed coatings — Symbolic representation on drawings

## 1 Scope

This document specifies how the symbolic representation of thermally sprayed coatings is indicated on drawings.

## 2 Normative references

There are no normative references in this document.

## 3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

## 4 General

Coatings may be indicated with the general recommendations for technical drawings. To apply this symbolic representation will make sense in cases where the thermally sprayed coating is very thin and/or can be built up by several dissimilar coatings one upon another.

The symbolic representation shall clearly give all the necessary indications regarding the specific coating to be obtained without over-burdening the drawing with notes or showing an additional view or detail enlargement.

This symbolic representation includes an elementary symbol and one or more supplementary symbols and further complementary indications.

If a large number of instructions for producing the coating have to be mentioned, it is recommended to indicate the specific instructions on the drawing or to define them in a separate parts' list, if applicable (see [Figures 6](#) and [7](#)).

## 5 Symbols

The elementary symbol shall indicate that this process deals with thermal spraying.

The following information shall be given by supplementary symbols:

- type of coating (bond or top coat);
- the spraying process and subsequent treatments.

The following requirements may be defined by further additional instructions:

- the coating thickness needed or the final coating thickness machined;
- the spray material to be used;