

<b>STN</b>	<b>Žiarové striekanie</b> <b>Odporúčania na navrhovanie dielcov so žiarovo</b> <b>striekanými povlakmi</b>	<b>STN</b> <b>EN 15520</b>  03 8719
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Thermal spraying - Recommendations for constructional design of components with thermally sprayed coatings

Táto norma obsahuje anglickú verziu európskej normy.  
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 10/24

Obsahuje: EN 15520:2024

Oznámením tejto normy sa ruší  
STN EN 15520 (03 8719) z februára 2008

**139286**

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Úrad pre normalizáciu, metrológiu a skúšobníctvo Slovenskej republiky, 2024  
Slovenská technická norma a technická normalizačná informácia je chránená zákonom č. 60/2018 Z. z. o technickej normalizácii  
v znení neskorších predpisov.

EUROPEAN STANDARD

EN 15520

NORME EUROPÉENNE

EUROPÄISCHE NORM

July 2024

ICS 25.220.20

Supersedes EN 15520:2007

English Version

## Thermal spraying - Recommendations for constructional design of components with thermally sprayed coatings

Projection thermique - Recommandations relatives à la conception des éléments de construction comportant un revêtement déposé par projection thermique

Thermisches Spritzen - Empfehlungen zum konstruktiven Gestalten von Bauteilen mit thermisch gespritzten Schichten

This European Standard was approved by CEN on 17 June 2024.

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**EN 15520:2024 (E)**

<b>Contents</b>		<b>Page</b>
<b>European foreword .....</b>		<b>3</b>
<b>Introduction .....</b>		<b>4</b>
<b>1</b>	<b>Scope.....</b>	<b>5</b>
<b>2</b>	<b>Normative references.....</b>	<b>5</b>
<b>3</b>	<b>Terms and definitions .....</b>	<b>5</b>
<b>4</b>	<b>Applications and specific properties of thermally sprayed coatings.....</b>	<b>5</b>
<b>5</b>	<b>Basic rules for design of components with thermal sprayed coatings.....</b>	<b>6</b>
<b>6</b>	<b>Design for preparation of components and work pieces for thermal spraying.....</b>	<b>7</b>
<b>7</b>	<b>Machining and post-treatment of thermal sprayed coatings.....</b>	<b>8</b>
<b>8</b>	<b>Instructions for design - Symbolic representation of the sprayed coating on drawings - Test instructions in the parts list.....</b>	<b>8</b>
<b>9</b>	<b>Examples for design suitable for spraying .....</b>	<b>8</b>
<b>9.1</b>	<b>Plane surfaces .....</b>	<b>8</b>
<b>9.2</b>	<b>Rotationally symmetrical parts .....</b>	<b>8</b>
<b>9.3</b>	<b>Special shape .....</b>	<b>9</b>
<b>Bibliography .....</b>		<b>17</b>

## European foreword

This document (EN 15520:2024) has been prepared by 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 January 2025, and conflicting national standards shall be withdrawn at the latest by January 2025 month year of DOW.

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 15520:2007.

EN 15520:2024 includes the following significant technical changes with respect to EN 15520:2007:

- normative references and bibliography updated;
- document editorially revised;
- Figures 2, 3 and 7 (now 8) revised and improved;
- new Figure 7 (*Examples for technology to avoid sharp edges at coating run-out*) added.

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

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**EN 15520:2024 (E)****Introduction**

Thermal spraying is applied to improve the surface properties of work pieces in order to increase the wear resistance, the electrical conductivity or the electrical resistance, to achieve corrosion resistance for the pertinent service conditions, to improve sliding behaviour or, to provide heat insulation. Recommendations for thermal spraying are contained in EN ISO 12679.

## 1 Scope

This document is applicable for thermal sprayed coatings. It contains basic recommendations for the design of components, which have to be completely or partially coated. The recommendations are applicable for new manufacturing as well as for repair of worn components. The coating can be of metallic, metal-ceramic, oxide-ceramic materials or polymers.

## 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN ISO 12671, *Thermal spraying — Thermally sprayed coatings — Symbolic representation on drawings (ISO 12671)*

**koniec náhľadu – text ďalej pokračuje v platenej verzii STN**