

# ***Geregistreeerde Belgische norm***

## **NBN EN ISO 14919**

2e uitg., februari 2015

**Normklasse: I 07**

### **Thermisch spuiten - Draden, staven en snoeren voor vlam- en boogspuiten - Indeling - Technische leveringsvoorwaarden (ISO 14919:2015)**

Projection thermique - Fils, baguettes et cordons pour projection thermique à l'arc et au pistolet dans une flamme - Classification - Conditions techniques d'approvisionnement (ISO 14919:2015)

Thermal spraying - Wires, rods and cords for flame and arc spraying - Classification - Technical supply conditions (ISO 14919:2015)

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Vervangt NBN EN ISO 14919 (2001).

Deze Europese norm EN ISO 14919:2015 heeft de status van een Belgische norm.

Deze Europese norm bestaat in drie officiële versies (Duits, Engels, Frans).

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***norme belge  
enregistrée***

**NBN EN ISO 14919**

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**Indice de classement: I 07**

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Remplace NBN EN ISO 14919 (2001).

La présente norme européenne EN ISO 14919:2015 a le statut d'une norme belge.

La présente norme européenne existe en trois versions officielles (allemand, anglais, français).

EUROPEAN STANDARD

EN ISO 14919

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English Version

## Thermal spraying - Wires, rods and cords for flame and arc spraying - Classification - Technical supply conditions (ISO 14919:2015)

Projection thermique - Fils, baguettes et cordons pour projection thermique à l'arc et au pistolet dans une flamme - Classification - Conditions techniques d'approvisionnement (ISO 14919:2015)

Thermisches Spritzen - Drähte, Stäbe und Schnüre zum Flammsspritzen und Lichtbogenspritzen - Einteilung - Technische Lieferbedingungen (ISO 14919:2015)

This European Standard was approved by CEN on 25 October 2014.

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**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

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## Foreword

This document (EN ISO 14919:2015) has been prepared by Technical Committee CEN/TC 240 "Thermal spraying and thermally sprayed coatings" the secretariat of which is held by DIN, in collaboration with Technical Committee ISO/TC 107 "Metallic and other inorganic coatings".

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 July 2015, and conflicting national standards shall be withdrawn at the latest by July 2015.

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

This document supersedes EN ISO 14919:2001.

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

### Endorsement notice

The text of ISO 14919:2015 has been approved by CEN as EN ISO 14919:2015 without any modification.



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**Thermal spraying — Wires, rods and  
cords for flame and arc spraying —  
Classification — Technical supply  
conditions**

*Projection thermique — Fils, baguettes et cordons pour projection  
thermique à l'arc et au pistolet dans une flamme — Classification —  
Conditions techniques d'approvisionnement*



# ISO 14919:2015(E)



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## ISO 14919:2015(E)

### 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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Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#)

ISO 14919 was prepared by the European Committee for Standardization (CEN) Technical Committee CEN/TC 240, *Thermal spraying and thermally sprayed coatings*, in collaboration with ISO Technical Committee ISO/TC 107, *Metallic and other inorganic 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 14919:2001), which has been technically revised.

## Introduction

Requests for official interpretations of any aspect of this standard should be directed to the secretariat of ISO/TC 107/WG 1 via your national standards body; a complete listing can be found at [www.iso.org](http://www.iso.org).



# Thermal spraying — Wires, rods and cords for flame and arc spraying — Classification — Technical supply conditions

## 1 Scope

This International Standard specifies requirements for classification of metal and non-metal wires (solid and cored), rods, cords processed by means of thermal spraying, especially by arc and flame spraying.

## 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 10474:2013, *Steel and steel products — Inspection documents*

ISO 544:2011, *Welding consumables — Technical delivery conditions for filler materials and fluxes — Type of product, dimensions, tolerances and markings*

## 3 Classification

### 3.1 Classification according to the manufacturing process and resulting structure

The thermal spray materials are classified according to the manufacturing process and the resulting structure, as given in [Table 1](#).

**Table 1 — Classification of thermal spraying material and resulting structure**

Number	Term	Manufacturing process	Structure
1	solid wire/rod	metallurgical manufacturing and forming	homogeneous composition
2	solid wire/rod	powder metallurgical manufacturing and forming	homogeneous composition
3	cored wire (tube shaped wire)	filling up a metal tube and compressed by means of forming	seamless metal shell with powder filling
4	cored wire (folded wire)	forming a metal sheet with powder filling, binder and compressed by means of drawing	metal shell with powder filling
5	cords	simultaneous extruding of powder, binder and organic sheath	plastic shell with powder filling
6	oxide ceramic rods	extruding and sintering respectively drying of ceramic material	porous rod consisting of bonded ceramic particles

### 3.2 Classification according to material groups and chemical composition

The material groups are given in [Table 2](#), and the chemical composition shall comply with [Tables 3](#) to [10](#).