



SLOVENSKI STANDARD SIST EN ISO 14918:2018

01-september-2018

Nadomešča:
SIST EN ISO 14918:1999

Vročje brizganje - Ugotavljanje primernosti opreme (ISO 14918:2018)

Thermal spraying - Qualification testing of thermal sprayers (ISO 14918:2018)

Thermisches Spritzen - Prüfung von thermischen Spritzern (ISO 14918:2018)

Projection thermique - Qualification des agents en projection thermique (ISO 14918:2018)

iTeh STANDARD PREVIEW
(standards.iteh.ai)

Ta slovenski standard je istoveten z: [SIST EN ISO 14918:2018](https://standards.iteh.ai/catalog/standards/sist-en-iso-14918-2018) EN ISO 14918:2018 [e-8f78-a3227dc0a6db/sist-en-iso-14918-2018](https://standards.iteh.ai/catalog/standards/sist-en-iso-14918-2018)

ICS:

25.220.20 Površinska obdelava Surface treatment

SIST EN ISO 14918:2018 en

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN ISO 14918:2018](#)

<https://standards.iteh.ai/catalog/standards/sist/fc0536da-63f5-431e-8f78-a3227dc0a6db/sist-en-iso-14918-2018>

EUROPEAN STANDARD

EN ISO 14918

NORME EUROPÉENNE

EUROPÄISCHE NORM

June 2018

ICS 25.220.20

Supersedes EN ISO 14918:1998

English version

Thermal spraying - Qualification testing of thermal sprayers (ISO 14918:2018)

Projection thermique - Qualification des agents en projection thermique (ISO 14918:2018)

Thermisches Spritzen - Prüfung von thermischen Spritzern (ISO 14918:2018)

This European Standard was approved by CEN on 23 April 2018.

CEN and CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN and CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN and CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN and CENELEC members are the national standards bodies and national electrotechnical committees of 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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



CEN-CENELEC Management Centre:
Rue de la Science 23, B-1040 Brussels

Contents	Page
European foreword.....	3

**iTeh STANDARD PREVIEW
(standards.iteh.ai)**

SIST EN ISO 14918:2018

<https://standards.iteh.ai/catalog/standards/sist/fc0536da-63f5-431e-8f78-a3227dc0a6db/sist-en-iso-14918-2018>

European foreword

This document (EN ISO 14918:2018) 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 December 2018, and conflicting national standards shall be withdrawn at the latest by December 2018.

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 14918:1998.

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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

iTeh STANDARD PREVIEW
Endorsement notice
(standards.iteh.ai)

The text of ISO 14918:2018 has been approved by CEN as EN ISO 14918:2018 without any modification.

<https://standards.iteh.ai/catalog/standards/sist/fe0536da-63f5-431e-8f78-a3227dc0a6db/sist-en-iso-14918-2018>

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN ISO 14918:2018](#)

<https://standards.iteh.ai/catalog/standards/sist/fc0536da-63f5-431e-8f78-a3227dc0a6db/sist-en-iso-14918-2018>

INTERNATIONAL
STANDARD

ISO
14918

Second edition
2018-04

**Thermal spraying — Qualification
testing of thermal sprayers**

*Projection thermique — Qualification des agents en projection
thermique*

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN ISO 14918:2018](https://standards.iteh.ai/catalog/standards/sist/fc0536da-63f5-431e-8f78-a3227dc0a6db/sist-en-iso-14918-2018)

[https://standards.iteh.ai/catalog/standards/sist/fc0536da-63f5-431e-8f78-
a3227dc0a6db/sist-en-iso-14918-2018](https://standards.iteh.ai/catalog/standards/sist/fc0536da-63f5-431e-8f78-a3227dc0a6db/sist-en-iso-14918-2018)



Reference number
ISO 14918:2018(E)

© ISO 2018

iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST EN ISO 14918:2018](https://standards.iteh.ai/catalog/standards/sist/fe0536da-63f5-431e-8f78-a3227dc0a6db/sist-en-iso-14918-2018)

<https://standards.iteh.ai/catalog/standards/sist/fe0536da-63f5-431e-8f78-a3227dc0a6db/sist-en-iso-14918-2018>



COPYRIGHT PROTECTED DOCUMENT

© ISO 2018

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Fax: +41 22 749 09 47
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

Contents

	Page
Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Essential requirements for qualification testing	2
4.1 General.....	2
4.2 Equipment operation.....	2
4.3 Masking procedure.....	2
4.4 Surface preparation.....	3
4.5 Environmental conditions.....	3
4.6 Application equipment.....	3
5 Range of qualification	3
5.1 General.....	3
5.2 Thermal spraying processes.....	3
5.2.1 Grouping of thermal spraying processes.....	3
5.2.2 Application methods.....	3
5.2.3 Spray materials.....	3
5.3 Qualification scope.....	4
5.4 Supervision.....	4
5.5 Shapes and dimensions of test pieces.....	4
5.6 Test methods.....	4
5.7 Acceptance requirements for test pieces.....	4
5.8 Spray consumables for the test.....	5
6 Examination and testing	5
6.1 General.....	5
6.2 Job knowledge test.....	5
6.3 Practical test.....	5
7 Re-tests	5
7.1 General.....	5
7.2 Additional tests.....	5
8 Period of validity	5
8.1 Initial qualification.....	5
8.2 Prolongation.....	6
8.2.1 Period.....	6
8.2.2 Thermal sprayer and production spraying.....	6
8.2.3 Interruption periods in thermal spray works.....	6
8.3 Requirements.....	6
8.4 Scheduling.....	6
8.5 Expired or cancelled qualification status.....	6
9 Records	6
10 Designation	6
Annex A (normative) Job knowledge	7
Annex B (normative) Specific acceptance criteria	10
Annex C (normative) Minimum tensile adhesive strength and shear load resistance values	15
Annex D (informative) Example of qualification test certificate for thermal sprayer	18

ISO 14918:2018(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).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

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 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 the following URL: www.iso.org/iso/foreword.html. (standards.iteh.ai)

This document was prepared by Technical Committee ISO/TC 107, *Metallic and other inorganic coatings*.

This second edition cancels and replaces the first edition (ISO 14918:1998), which has been technically revised.

Introduction

This document examines the principles of qualification testing of sprayer performance for thermal spraying.

The quality of work involved in thermal spraying depends on the skill, operation of the spray equipment and job knowledge of the thermal sprayer.

The ability of the thermal sprayer to follow verbal and written instructions and the testing of his/her skill and operation of the spray equipment are therefore important factors in ensuring the quality of the thermally sprayed product.

This document is intended to provide the basis for mutual recognition by examining bodies for qualification relating to thermal sprayer's competence in the various fields of application. Tests can be carried out in accordance with this document, unless more severe tests are specified by the relevant application standards in which case these can be applied.

The thermal sprayer's skill and job knowledge continues to be classified as qualified as long as the thermal sprayer works with reasonable continuity on thermal spraying work within the extent of qualification.

iTeh STANDARD PREVIEW (standards.iteh.ai)

[SIST EN ISO 14918:2018](https://standards.iteh.ai/catalog/standards/sist/fc0536da-63f5-431e-8f78-a3227dc0a6db/sist-en-iso-14918-2018)

<https://standards.iteh.ai/catalog/standards/sist/fc0536da-63f5-431e-8f78-a3227dc0a6db/sist-en-iso-14918-2018>

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN ISO 14918:2018

<https://standards.iteh.ai/catalog/standards/sist/fc0536da-63f5-431e-8f78-a3227dc0a6db/sist-en-iso-14918-2018>