

**Kuumpihustamine. Kvaliteedinõuded  
kuumpihustatud struktuuridele. Osa 3:  
Standardised kvaliteedinõuded**

Thermal spraying - Quality requirements of thermally  
sprayed structures - Part 3: Standard quality  
requirements

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 14922-3:2000 sisaldab Euroopa standardi EN ISO 14922-3:1999 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 11.01.2000 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN ISO 14922-3:2000 consists of the English text of the European standard EN ISO 14922-3:1999.</p> <p>This document is endorsed on 11.01.2000 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p><b>Käsitlusala:</b></p> <p>This standard has been prepared such that: - it is independent of the type of the thermally sprayed structure; - it defines quality requirements for thermal spraying both in workshops and on site; The requirements are appropriate when demonstration of a manufacturer's capability to produce thermally sprayed construction, fulfilling specified quality requirements, are specified.</p>	<p><b>Scope:</b></p> <p>This standard has been prepared such that: - it is independent of the type of the thermally sprayed structure; - it defines quality requirements for thermal spraying both in workshops and on site; The requirements are appropriate when demonstration of a manufacturer's capability to produce thermally sprayed construction, fulfilling specified quality requirements, are specified.</p>
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ICS 25.220

Võtmesõnad:

English version

Thermal spraying  
Quality requirements for thermally sprayed structures  
Part 3: Standard quality requirements  
(ISO 14922-3 : 1999)

Projection thermique – Exigences  
qualité des constructions obtenues  
par projection thermique – Partie 3:  
Exigences qualité standard  
(ISO 14922-3 : 1999)

Thermisches Spritzen – Qualitäts-  
anforderungen an thermisch  
gespritzte Bauteile – Teil 3: Standard-  
Qualitätsanforderungen  
(ISO 14922-3 : 1999)

This European Standard was approved by CEN on 1999-02-19.

CEN 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 Central Secretariat or to any CEN member.

The European Standards exist in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

**CEN**

European Committee for Standardization  
Comité Européen de Normalisation  
Europäisches Komitee für Normung

Central Secretariat: rue de Stassart 36, B-1050 Brussels

## Foreword

International Standard

ISO 14922-3 : 1999 Thermal spraying – Quality requirements of thermally sprayed structures – Part 3: Standard quality requirements,

which was prepared by ISO/TC 107 'Metallic and other inorganic coatings' of the International Organization for Standardization, has been adopted by Technical Committee CEN/TC 240 'Thermal spraying and thermally sprayed coatings', the Secretariat of which is held by DIN, as a European Standard.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, and conflicting national standards withdrawn, by December 1999 at the latest.

In accordance with the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard:

Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

## Endorsement notice

The text of the International Standard ISO 14922-3 : 1999 was approved by CEN as a European Standard without any modification.

NOTE: Normative references to international publications are listed in Annex ZA (normative).

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## 1 Scope

This standard specifies requirements so that:

- It is independent of the type of the thermally sprayed structure.
- It defines quality requirements for thermal spraying both in workshops and on site.
- It provides guidance for describing a manufacturer's capability to produce thermally sprayed constructions to meet specified requirements.
- It may also be used as a basis for assessing the manufacturer in respect to his thermal spraying capability.

This standard is appropriate when demonstration of a manufacturer's capability to produce thermally sprayed construction, fulfilling specified quality requirements, are specified in one or more of the following:

- a contract between involved parties;
- an application standard;
- a regulatory requirement.

The requirements contained within this standard may be adopted in full or may be selectively deleted by the manufacturer if not applicable to the construction concerned. They provide a flexible framework for the control of thermal spraying in the following cases:

- Case 1

To provide specific requirements for thermal spraying in contracts which require the manufacturer to have a quality system other than EN ISO 9001 or EN ISO 9002.

- Case 2

To provide specific requirements for thermal spraying in contracts which require the manufacturer developing a quality system.

- Case 3

To provide specific requirements for thermal spraying in application standards which uses thermal spraying as part of its requirements or in a contract between relevant parties. It may however be more appropriate for EN ISO 14922-4 to be used in such cases.

## 2 Normative references

This European standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

EN 473  
Non-destructive testing – Qualification and certification of personnel

EN 582  
Thermal spraying – Determination of the adhesive tensile strength

EN 657  
Thermal spraying – terminology – Classification

EN 1274

Thermal spraying – Powders – Composition – Technical supply conditions

prEN 13214

Thermal spraying – Thermal spray coordination – Tasks and responsibilities

EN ISO 9001

Quality systems – Model for quality assurance in design/development, production, installation and servicing (ISO 9001 : 1994)

EN ISO 9002

Quality systems – Model for quality assurance in production, installation and servicing (ISO 9002 : 1994)

EN ISO 14918

Thermal spraying – Approval testing for thermal sprayers

prEN ISO 14919

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

EN ISO 14922-1

Thermal spraying – Quality requirements of thermally sprayed structures – Part 1: Guidelines for selection and use

ISO 8402 : 1994

Quality management and management assurance – Vocabulary

### 3 Definitions

For the purposes of this standard definitions given in EN 657 and listed in part 1 of this standard apply.

### 4 Contract and design review

#### 4.1 General

The manufacturer shall review the contractual requirements and the design data provided by the purchaser or in-house data for construction designed by the manufacturer. This is to ensure that all information necessary to carry out the fabrication operations is available prior to the commencement of the work. The manufacturer shall affirm his capability to meet all thermal spraying contract requirements and ensure adequate planning of all quality related activities.

The items in 4.2 are typically considered at or before time of the contract review. The items in 4.3 usually form part of the design review and should be taken into account during the contract review if the design is not carried out by the manufacturer. It shall be ensured that all relevant information has been supplied by the purchaser.

When a contract does not exist, e.g. items made for stock, the manufacturer is required to take into consideration the requirements of 4.2, whilst carrying out his design review (4.3).

#### 4.2 Application – Contract review

Contractual requirements to be considered should include:

- a) the application standard to be used, together with any supplementary requirements;
- b) the specification of thermal spraying procedures, non-destructive testing procedures and heat treatment procedures;
- c) the approval of personnel, if contractual agreed;
- d) inspection and testing;
- e) quality control arrangements, including any involvement of an independent inspection body;