SLOVENSKI STANDARD
oSIST prEN 15339-4:2012

01-september-2012

Vroče brizganje - Varnostne zahteve za opremo za vroče brizganje - 4. del: Oskrbovanje s plinskim in tekočim gorivom

Thermal spraying - Safety requirements for thermal spraying equipment - Part 4: Gas and liquid fuel supply

Thermisches Spritzen - Sicherheitsanforderungen für Einrichtungen für das thermische Spritzen - Teil 4: Gas- und Flüssigbrennstoffversorgung

Ta slovenski standard je istoveten z: **prEN 15339-4**

ICS:

25.220.20	Površinska obdelava	Surface treatment

oSIST prEN 15339-4:2012 **en,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

DRAFT
prEN 15339-4

June 2012

ICS 25.220.20

English Version

Thermal spraying - Safety requirements for thermal spraying equipment - Part 4: Gas and liquid fuel supply

Thermisches Spritzen - Sicherheitsanforderungen für Einrichtungen für das thermische Spritzen - Teil 4: Gas- und Flüssigbrennstoffversorgung

This draft European Standard is submitted to CEN members for enquiry. It has been drawn up by the Technical Committee CEN/TC 240.

If this draft becomes a European Standard, 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.

This draft European Standard was established by CEN 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 CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of 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, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.

Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

Warning : This document is not a European Standard. It is distributed for review and comments. It is subject to change without notice and shall not be referred to as a European Standard.

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

Management Centre: Avenue Marnix 17, B-1000 Brussels

Contents

Page

Foreword

This document (prEN 15339-4:2012) has been prepared by Technical Committee CEN/TC 240 “Thermal spraying and thermally sprayed coatings”, the secretariat of which is held by DIN.

This document is currently submitted to the CEN Enquiry.

1 Scope

This part of EN 15339 specifies safety requirements of machines and equipment for thermal spraying, in this case of gas supply including supply of liquid fuels.

This part of EN 15339 should be used in conjunction with prEN 15339-1, which deals with general aspects when designing, manufacturing, and/or putting in service of machines or equipment and with the responsibility for issuing the CE Conformity Declaration.

Generally, the requirements of EU Directive 94/9/EC [1] are valid for the use of this European Standard.

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.

EN 657, *Thermal spraying — Terminology and classification*

prEN 15339-1, *Thermal spraying — Safety requirements for thermal spraying equipment — Part 1: General requirements*

EN 15339-2, *Thermal spraying — Safety requirements for thermal spraying equipment — Part 2: Gas control units*

prEN 15339-3, *Thermal spraying — Safety requirements for thermal spraying equipment — Part 3: Torches for thermal spraying and their connections and supply units*

prCEN/TR 15339-6, *Thermal spraying — Safety requirements for thermal spraying equipment — Part 6: Spray cabin, handling system, dust collection, exhaust system, filter*

3 Function of thermal spraying equipment

3.1 General

Thermal spraying processes are described and schematically represented in EN 657.

Thermal spraying uses flammable gases for flame, plasma or HVOF (high velocity oxygen fuel) spraying processes, which possess a significant potential of danger. Pure oxygen shall also be considered a dangerous gas, because also hardly inflammable material will burn in the presence of a certain concentration of oxygen.

Furthermore, pressurised air, nitrogen, or carbon dioxide (CO_2) are applied for cooling the substrate's surface or the part to be sprayed. Likewise, flammable gases and oxygen are used for fusing of sprayed coatings made out of self fluxing alloys.

For such applications, an appropriate and safe supply shall be ensured by gases from manifold cylinder banks, cryogenic gas tanks or public piping systems (natural gas). Usually, such supply systems are used for gas pressure of more than 20 bar.

The installation of the gas delivery system, taken in conjunction with control measures, such as gas detection and interlocking of the thermal spray equipment, forms a crucial part of the HAC. The respective class shall be considered. For details, see prEN 15339-1 and prCEN/TR 15339-6.