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Standards

Irish Standard
I.S. EN ISO 14921:2010

Thermal spraying - Procedures for the application of thermally sprayed coatings for engineering components (ISO 14921:2010)

I.S. EN ISO 14921:2010

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English Version

Thermal spraying - Procedures for the application of thermally sprayed coatings for engineering components (ISO 14921:2010)

Projection thermique - Mode opératoire d'application de revêtements obtenus par projection thermique pour les pièces mécaniques (ISO 14921:2010)

Thermisches Spritzen - Vorgehen für das Anwenden thermischer Spritzschichten für Bauteile im Maschinenbau (ISO 14921:2010)

This European Standard was approved by CEN on 10 December 2010.

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Foreword

This document (EN ISO 14921:2010) 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of an identical text or by endorsement, at the latest by June 2011, and conflicting national standards shall be withdrawn at the latest by June 2011.

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**INTERNATIONAL
STANDARD**

**ISO
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Second edition
2010-12-15

**Thermal spraying — Procedures for the
application of thermally sprayed coatings
for engineering components**

*Projection thermique — Mode opératoire d'application de revêtements
obtenus par projection thermique pour les pièces mécaniques*



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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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ISO 14921 was prepared by Technical Committee CEN/TC 240, *Thermal spraying and thermally sprayed coatings* of the European Committee for Standardization (CEN) 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 14921:2001), which has been technically revised.

Introduction

Components might fail if the surface does not fulfil the physical, chemical, and/or technological requirements. For several applications, this deficiency can be avoided by a thermally sprayed coating.

Where appropriate, a coating may be applied to protect the component's surface or to improve its behaviour by increasing the resistance against wear and/or corrosion, or the electrical or thermal conductivity or insulation or by reducing the friction coefficient.

There are limits to the applicable thickness of some thermally sprayed coatings. However, several different coatings may be built up one upon another. In the case of extensive loss of material through corrosion or wear, an alternative suitable spraying material may be applied prior to the top coat or the bond and top coat.

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