
Thermal spraying — Powders —

**Part 1:
Characterization and technical supply
conditions**

Projection thermique — Poudres —

Partie 1: Caractérisation et conditions techniques de livraison

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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.

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).

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

This first edition of ISO 14232-1, together with ISO/TR 14232-2, cancels and replaces ISO 14232:2000.

A list of all parts in the ISO 14232 series can be found on the ISO website.

Introduction

For thermal spray processes that use material in a powder form, the powder can be considered as one of the main elements requiring control to produce an acceptable coating. The chemical and physical properties of powder play a fundamental role in the creation of desired coating properties. The size, shape and morphology of the powder particles determine the melting behaviour and therefore the processing of powders in general.

To keep the coating properties and the spray process as consistent as possible, it is very important to maintain all the characteristics of powder particles within limited tolerances.

An exception is granted to details on the properties of sprayed coatings. Such properties, which result from spraying conditions not covered by this document, e.g. gas composition, deposition efficiency, material flow rate, stand-off distance, etc., can differ greatly from the properties of the original powder.

The ISO 14232 series consists of two parts. This document examines the characterization of spray powders. ISO/TR 14232-2 is a technical report that examines how technical literature describes the application of powders.

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