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Nota di contenuto	Thermal Spraying for Power Generation Components; Preface; Acknowledgement; The Authors of this Book; Contents; 1 Introduction; 1.1 Requirements for Materials and Coatings in Powerplants; 1.2 Examples of Coatings in Gas Turbines; 1.3 Definition of Thermal Spraying (THSP); 1.4 Thermal-Spraying Systems; 1.5 Coatings for Power-Generation Components; 1.6 The Complete Manufacturing and Coating Process; 1.7 Coating-Process Development; 1.8 Tasks for "Target" Readers; 2 Practical Experience Today; 2.1 Coating Processes; 2.2 Basics of Thermal Spraying; 2.3 Feedstock; 2.3.1 Wire; 2.3.2 Powder 2.3.2.1 Powder Types2.3.2.2 Powder-Production Processes and Morphologies; 2.3.2.3 Powder Characterization; 2.3.2.4 Powders for Power-Generation Applications; 2.4 Thermal-Spraying Equipment; 2.4.1 Example of a Low-Pressure Plasma-Coating System; 2.4.2 Flame and Arc Spray Torches; 2.4.3 HVOF Process; 2.4.3.1 Comparison of HVOF Fuels; 2.4.3.2 A Brief Overview of the Major Existing HVOF Systems; 2.4.3.3 Possible Improvements of HVOF Systems; 2.4.4 Plasma Process; 2.4.4.1 A Brief Overview of Plasma Torches; 2.4.4.2 Possible Improvements of Plasma Systems 2.5 Work Flow and Important Coating Hardware2.5.1 Powder

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Sommario/riassunto

Thousands of patents address new coating types, new developments, new chemical compositions. However, sometimes coatings is still considered as an ""art"". This book now deals with questions that are essential for a good performance of this ""art"": Is there a given process stability? Is there an inherent process capability for a given specification which cannot be improved? What is the right preventive maintenance strategy? Is there a chance to end up with coating process capabilities in the order of other manufacturing processes? This book is not a pure scientific book. It is of most val