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Nota di contenuto	Modern Surface Technology; Preface; Contents; List of Contributors; 1 Selecting Surface-treatment Technologies; 1.1 Introduction; 1.2 Requirements on Part Surfaces; 1.3 Selecting Coating and Surface Technologies; 1.4 Processes for Surface Modification and Coating; 1.5 Economic Assessment of Surface-treatment Technologies; 1.6 Summary and Conclusions; References; 2 Stainless Austenitic Steel - Surface Hardening for Increased Wear Resistance; 2.1 Introduction; 2.2 Fundamentals; 2.2.1 Heat Treatment; 2.2.1.1 Surface-hardening Processes; 2.2.2 Stainless Steels 2.2.2.1 Classification of Stainless Steels2.2.2.2 Stainless Austenitic Steels; 2.3 Technologies for Surface Hardening of Austenitic Stainless Steels; 2.3.1 Kolsterising; 2.3.1.1 Influence on Microstructure; 2.3.1.2 Influence on Chemical Composition; 2.3.1.3 Influence on Mechanical Properties; 2.3.1.4 Wear Resistance; 2.3.1.5 Influence on Corrosion Resistance; 2.3.2 Kolsterising plus PVD Coating; 2.3.2.1 Coating

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5.6.2 Heat Treatment and Dimensional Accuracy

Sommario/riassunto

This translation of a successful German title provides a broad and fundamental overview of current coating technology. Edited by experts from one of the largest research centers for this field in Germany, this valuable reference combines research and industrial perspectives, treated by authors from academia and industry alike. They discuss the potential of the many innovations introduced into industrial application in recent years, allowing materials scientists and engineers to find the appropriate solution for their own specific coating problems. Thus, with the aid of this book, it is possible
