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Titolo	Advances in materials processing technologies : selected, peer reviewed papers from the 4th Manufacturing Engineering Society International Conference (MESIC 2011), September, 2011, Cadiz, Spain // edited by M. Marcos and J. Salguero
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Collana	Advanced Materials Research, , 1022-6680 ; ; Volume 498
Altri autori (Persone)	MarcosM SalgueroJ
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Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters and indexes.
Nota di contenuto	Advances in Materials Processing Technologies, MESIC 2011; Preface, Committees and Sponsors; Table of Contents; A Mechanistic Model for High Speed Turning of Austenitic Stainless Steels; A Method for Obtaining Spur Gears from Nanostructured Materials; A Proposal for Bending Process of TRIP Steel Sheets Based on the Springback Behavior; An Analysis of the Influence of Cutting Parameters on the Turning Process on the Fatigue Life of Aluminum Alloy UNS A92024-T351; Analysis of Cutting Forces during Dry Turning Processes of UNS A92024-T3 Aluminium Bars Analysis of Technological Factors in Open Die Forging by Comparison of Different Analysis Methods Application of Laser Texturization to Increase the Depth of AA5083 Welds; Approach to the Study of Workpiece Damage in Drilling of Carbon Fiber Composites by Using Thermography IR; Comparison between a Laser Micrometer and a Touch Trigger Probe for Work piece Measurement on a CNC Lathe; Cutting Tool Selection through Tool Wear, Cost, Power Consumption and Surface Roughness Analyses; Digital Modeling of End-Mill Cutting Tools for FEM Applications from the Active Cutting Contour Economical Assembly of Aluminium Parts with Composite Materials in

Automotive Competitive Industry Effect of the Reference Line on Main Roughness Parameters; Effects of Wear on Cutting Forces in End-Milling Nickel Alloy; Evaluation of On-Line Signals for Roundness Monitoring; Experimental Analysis of Process Parameters to Manufacture Micro-Cavities by Micro-Milling; Experimental Characterization of the Mechanical Behavior of Concrete Bars in the Tensile Test; Feasibility Evaluation of Photogrammetry versus Coordinate Measuring Arms for the Assembly of Welded Structures

Finite Elements Analysis and Multiobjective Optimization: A Way to Reduce Material and Manufacturing Cost Flank Wear and Surface Roughness Estimation in Steel Turning; Force and Deformation Model for Error Correction in Boring Operations; High Performance Cutting of Aerospace Materials; Image Based Analysis Evaluation of the Elements of Secondary Adhesion Wear in Dry Turning of Aluminum Alloys; Improvement of the Mechanical Properties of Formed Steel Cross Section Profile for Timber Upgrading; Influence of Cutting Conditions on Temperature Rise, Feed Force and Cutting Torque when Drilling Bone

Laser Tracker Based Volumetric Verification of Machine Tools Machining Control of Surface Roughness by Measuring Cutting Forces; Mechanistic Model for High Speed Turning of Austempered Ductile Irons; Metrology - Base for Scientific Cognition and Technical Production; Milling Strategies for Thin-Walled Components; Modeling and Simulation of Vibration-Assisted Extrusion Tapping of Internal Thread with Finite Element Method (FEM); Optimizing the Turning of Titanium Aluminide Alloys; Physical Model to Predict the Ball-Burnishing Forces Processing and Characterization of New Organic Matrix for Composite Materials Based on Acrylated Epoxidized Vegetable Oils

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#### Sommario/riassunto

This volume is aimed particularly at all manufacturing engineers working in the title fields. This collection of peer-reviewed contributions covering the most recent advances and innovative trends in Materials Processing Technologies (MPT) should be required reading material for anyone operating in the industry. Review from Book News Inc.: A selection of 43 peer-reviewed papers discuss machining processes, forming processes, molding processes, and other aspects of materials processing that relate to manufacturing engineering. The topics include a method for obtaining spur gears from nanostruct

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