

|                         |   |
|-------------------------|---|
| 1. Record Nr.           | UNINA9910786607703321   |
| Titolo                  | Advances in materials processing technologies : selected, peer reviewed papers from the 5th International Conference of Manufacturing Engineering Society (MESIC 2013), June 26-28, 2013, Zaragoza, Spain / / edited by Juan Jose Aguilar Martin and Jose Antonio Yague Fabra   |
| Pubbl/distr/stampa      | Zurich, Switzerland : , : TTP, , 2014<br>©2014  |
| ISBN                    | 3-03826-508-X   |
| Descrizione fisica      | 1 online resource (181 p.)  |
| Collana                 | Materials Science Forum, , 1662-9752 ; ; Volume 797   |
| Disciplina              | 670   |
| Soggetti                | Production engineering<br>Computer integrated manufacturing systems<br>Manufacturing processes  |
| Lingua di pubblicazione | Inglese   |
| Formato                 | Materiale a stampa  |
| Livello bibliografico   | Monografia  |
| 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; Preface, Scientific Committee and Sponsors; Table of Contents; I. Integrated Development of Products and Processes; Influence on Manufactured Products Design of the Processes of Project Management; Influence of Standard ISO 21500 in the Management of Collaborative Networks; II. Machining Processes; A Tool Wear Monitoring System for Steel and Aluminium Alloys Based on the same Sensor Signals and Decision Strategy; Analysis of Cutting Forces in Peripheral Milling under Varying Machining Conditions<br>Analysis of Energy Consumption in the Dry Drilling of PEEK GF30<br>Comparison of Diameter and Area Change Based Methods for Evaluating Break-IN and Break-OUT Damages in Dry Drilled Holes of Aeronautical Carbon Fiber Composites; Contribution of Surface Finish Monitoring Signals in CNC Taper Turning; Cutting Forces Prediction in the Dry Slotting of Aluminium Stacks; Evaluation of Cutting Tools Secondary Adhesion Wear Using 3D Optical Topography Techniques - Application to Dry Turning of Al-Cu Aerospace Alloy; Experimental Prediction Model for Roughness in the Turning of UNS A97075 Alloys |

Influence of the Dry Turning Parameters on the Ultimate Tensile Strength (UTS) of UNS A92024 Samples; Real Time Diagnosis Charts of Thread Quality in Tapping Operations; Relationship of Pocket Geometry and Tool Path Strategy with 2 1/2-D Milling Parameters; Machining Time, Cutting Forces and Surface Roughness; Topography Prediction on Grinding of Emerging Aeronautical TiAl Intermetallic Alloys; III. Forming Processes; An Upper Bound Approach of Ring Compression Test Solutions; Characterization of Metal Heating Elements for Resistance Welding of Thermoplastic Matrix Composites (PEEK) Finite Element Model Correlation of an Investment Casting Process; Observations on the Use of Friction Factor Maps in Metal Forming; Selection of the Optimal Distribution for the Upper Bound Theorem in Indentation Processes; IV. Non-Traditional Manufacturing Processes; Boundary Element Method Applied to Electroforming Process; Electrolyte Effect on the Surface Roughness Obtained by Electropolishing of AISI 316L Stainless Steel; Energy Efficient Heat Treatment Process Design and Optimisation; Parametric Modeling and Compensation of Layer Manufacturing Machines; Polishing of Ductile Cast Iron with Scan-Head Guided Fiber Laser; Surface Quality Analysis in Selective Laser Melting with CoCrMo Powders; Surface Quality Improvement and Tool Footprint Analysis in a Robotic Grinding Cell; Technical Evaluation of Structural Adhesive Joints under Adverse Operation Conditions; Keywords Index; Authors Index

---

Sommario/riassunto

This volume is devoted to all the manufacturing engineers that work in Integrated development of products and processes, Machining processes, Forming processes and Non-traditional manufacturing processes. Thereby, this issue contains peer reviewed selected contributions on the aforementioned fields, showing the most recent advances in the most innovative trends in Materials Processing Technologies. The 27 selected papers from MESIC V focus on the integrated development of products and processes, machining processes, forming processes, and non-traditional manufacturing processes. Among the topi

---