

1. Record Nr.	UNINA9910811577803321
Titolo	Metal forming 2014 : selected, peer reviewed papers from the 15th International Conference on Metal Forming 2014, September 21-24, 2014, Palermo, Italy // edited by Fabrizio Micari and Livan Fratini
Pubbl/distr/stampa	Pfaffikon, Switzerland : , : TTP, , 2014 Enfield, New Hampshire : , : Trans Tech Publications Ltd, , [date of distribution not identified] ©2014
ISBN	3-03826-576-4
Descrizione fisica	1 online resource (1242 p.)
Collana	Key Engineering Materials, , 1662-9795 ; ; Volumes 622-623
Disciplina	671
Soggetti	Metal-work
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 and index.
Nota di contenuto	Metal Forming 2014; Preface and Committees; Table of Contents; Keynotes; Advanced In-Process Control System for Sheet Stamping and Tube Hydroforming Processes; Beta-Forging of Titanium Ti6Al4V Alloy Powders: Phase Evolution Modeling and Strain-Rate Relation; Chapter 1. Coatings and Surfaces; Advancement in Understanding of Descalability during High Pressure Descaling; Characteristics of Fluoride Based Conversion Coating Film on Al-Alloy for Metal Forming Applications; High Temperature Thermal Stability of Innovative Nanostructured Thin Coatings for Advanced Tooling Identification of Defects of Stainless Steel Sold with Brand Names, by Studying their Surface Thin Films with Scanning Electron Microscope (SEM) Motion-Controlled Precise Stamping for Microtexturing onto Aluminum Sheet; Prediction of Ridging by 3-Dimensional Texture in Ferritic Stainless Steels; Chapter 2. Extrusion and Drawing; A Multi-Objective Optimization of a Porthole Die Extrusion for Quality and Sustainability Issues; Bridge Design Influences on the Pressure Conditions in the Welding Chamber for Porthole Die Extrusion Effects of Temperature and Cross Section Variations on the Vibrational Behavior of Finished Wire Blocks Environmental Comparison between a Hot Extrusion Process and Conventional Machining Processes through a

Life Cycle Assessment Approach; Investigation of the Mandrel's Stress States and Wear Conditions during Tube Hot Extrusion of IN690 Superalloy; Load Prediction for the Extrusion from Circular Billet to Symmetric and Asymmetric Polygons Using Linearly Converging Die Profiles; Method for Producing Twist Drills by Extrusion Using a Three-Slide Forging Press

Numerical Simulation of the Crystallographic Texture Evolution during Hot Extrusion of Oxides Dispersed Strengthened Steels Effect of ECAE on Structure and Strength of Porous A6061 Alloy with Aligned Unidirectional Pores; The Effects of Non-Metallic Inclusion on Ductile Damage of High Carbon Steel Wire in Multi-Pass Dry Drawing Process; Chapter 3. Forging; An Experimental and Numerical Investigation into Forming Force Reduction in Precision Gear Forging; Effect of Hot Forging and Different Cooling Rates on the Microstructure, Mechanical Properties of Carbon Steel Containing 0.8 and 1.2Al

Estimation of Strain-Hardness Correlation in Cold-Forged Austenitic Stainless Steel Forging of Parts Having Strength Distribution Using Tailor Friction-Welded Billets Composed of Steel Bars Having Different Quenchabilities; Friction in Hot Forging of Chrome Steel Covered with Oxide Scale Film Generated at Steam Atmosphere; Hot Spline Forming of Ultra-High Strength Steel Gear Drum Using Resistance Heating; Modelization and Validation of Ti-6Al-4V Alloy Material Constitutive Law for Isothermal Forging Process; New Method for Forming Brackets with a Triangular Rib

Optimization of Hot Press Forging Parameters in Direct Recycling of Aluminium Chip (AA 6061)

Sommario/riassunto

Collection of selected, peer reviewed papers from the 15th International Conference on Metal Forming 2014, September 21-24, 2014, Palermo, Italy . The 159 papers are grouped as follows: 1. COATINGS AND SURFACES, 2. EXTRUSION AND DRAWING, 3. FORGING, 4. FORMABILITY, 5. INCREMENTAL FORMING, 6. JOINING AND BONDING, 7. MAGNESIUM FORMING, 8. NUMERICAL MODELLING, 9. TUBE AND HYDRO FORMING, 10. OPTIMISATION, 11. OTHER PROCESSES, 12. POWDER AND ADVANCED MATERIALS, 13. ROLLING, 14. SHEARING, 15. SHEET METAL FORMING, 16. TITANIUM FORMING About 160 papers from more than 20 countries describe the state of
