

1. Record Nr.	UNINA9910811890603321
Titolo	Tribology in manufacturing processes and joining by plastic deformation : selected, peer reviewed papers from the 6th International Conference on Tribology in Manufacturing Processes & Joining by Plastic Deformation, June 22-24, 2014, Darmstadt, Germany // edited by Peter Groche
Pubbl/distr/stampa	Zurich, Switzerland : , : TTP, , 2014 ©2014
ISBN	3-03826-510-1
Descrizione fisica	1 online resource (672 p.)
Collana	Advanced Materials Research, , 1662-8985 ; ; Volume 966-967
Disciplina	670.42
Soggetti	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	Tribology in Manufacturing Processes & Joining by Plastic Deformation; Preface and Scientific Committee; Table of Contents; Chapter 1: Plenary Keynotes; Off-Line Testing of Tribo-Systems for Sheet Metal Forming Production; Combination of Plastic Upsetting Joining and Plastic Serration Joining of Disk and Shaft; Joining Processes by Plastic Deformation; Two-Dimensional Roll Bite Model with Lubrication for Cold Strip Rolling; Chapter 2: Wear and Friction Testing; Friction Measurement Device for Fiber Material Forming Processes Influences of Cobalt Content on the Physical and Tribological Properties of Cemented Tungsten Carbide Used in Sheet Metal Forming Application Development of a Heating System for a Spiral Tribometer to Investigate the Influence of Temperature on Tribological Systems; The Influence of Initial Commutator Surface Roughness on Wear of the Starter Motor Commutation System; A Wear Damage Assessment of High Temperature Forging Tool; Surface Textures and Friction Control in Microforming; Identification of Local Lubrication Regimes on Textured Surfaces by 3D Roughness Curvature Radius Chapter 3: Machining Operations Effects of External Hydrostatic Pressure on Finished Surface in Silicon Cutting; Investigating the Effect

of Ultrasonic Vibration on Hole Accuracy in Drilling of Metal Matrix Composites; Micro Dimple Milling for Structured Surface; Topographic Wear Monitoring of the Interface Tool/Workpiece in Milling AISI H13 Steel; Evolution of Dynamic Recrystallization of AISI-1045 Steel under Critical Friction Conditions; Mutual Effect of Groove Size and Anisotropy of Cylinder Liner Honed Textures on Engine Performances  
The Role of Tool Geometry and Process Parameters during Fly Shearing in Hot Rolling of Steel Rheological Investigation of MIM Feedstocks for Reducing Frictional Effects during Injection Moulding; Chapter 4: Sheet Forming; Wear Behaviour of Al-Si and Zn Coated 22MnB5 in Hot Stamping; Lubricant Film Breakdown and Material Pick-Up in Sheet Forming of Advanced High Strength Steels and Stainless Steels when Using Environmental Friendly Lubricants; Micro-Plasto-Hydrodynamic Lubrication a Fundamental Mechanism in Cold Rolling  
Direct Evaluation of Coulomb Friction Coefficient from Sheet Strip Stretch Test on a Cylinder Surface Influence of Tool Steel Hard Phase Orientation and Shape on Galling; Characterization of Tool Coatings for Press Hardening; Experimental and Numerical Investigations on Frictional Behaviour under Consideration of Varying Tribological Conditions; Chapter 5: Massive Forming; Development of Upsetting-Extrusion Type Tribometer for Evaluating Lubrication Coating Performance in Cold Forging; Enhancement of Tribological Performance via Innovative Tooling Design for Extrusion Processes  
Influence of Flow Stress on Lubricating Ability of Environmentally-Friendly Lubricant for Aluminum Alloy Cold Forging

---

Sommario/riassunto

Collection of selected, peer reviewed papers from the 6 th International Conference on Tribology in Manufacturing Processes & Joining by Plastic Deformation, June 22-24, 2014, Darmstadt, Germany. The 63 papers are grouped as follows: Chapter 1: Plenary Keynotes, Chapter 2: Wear and Friction Testing, Chapter 3: Machining Operations, Chapter 4: Sheet Forming, Chapter 5: Massive Forming, Chapter 6: Lubrication and Surface Treatments, Chapter 7: Metallurgical Joining, Chapter 8: Simulation of Joining Processes, Chapter 9: Mechanical Joining

---