

1. Record Nr.	UNINA9910812972103321
Titolo	History of mechanical technology and mechanical design 2012 : selected, peer reviewed papers from the 9th International Conference on History of Mechanical Technology and Mechanical Design, (ICHMTMD2012), March 23-25, 2012, Taiwan // edited by Hong-Sen Yan [and six others]
Pubbl/distr/stampa	Durnten-Zuerich, Switzerland : , : Trans Tech Publications, , [2012] ©2012
ISBN	3-03813-738-3
Descrizione fisica	1 online resource (290 p.)
Collana	Applied mechanics and materials, , 1662-7490 ; ; volume 163
Altri autori (Persone)	YanHong-Sen <1951->
Disciplina	620.1
Soggetti	Mechanical engineering Engineering design
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Previous name of conference: China-Japan International Conference on History of Mechanical Technology and Mechanical Design. " ... International Conference on History of Mechanical Technology and Mechanical Design ... held in Taiwan during March 23-25, 2012 and undertaken by National Cheng Kung University" -- preface.
Nota di bibliografia	Includes bibliographical references and indexes.
Nota di contenuto	History of Mechanical Technology and Mechanical Design 2012; Preface and Conference Organizers; Table of Contents; Historical Development of Reconstruction Designs of Antikythera Mechanism; Reconstruction Study on the Bellow of Blast Furnace in Liao Dynasty - A Case of the Iron Smelting Site at Shuiquan Gou, Yanqing in Beijing; A Pragmatic Approach to Reduce Environmental Load in Machining Process; Effect of Friction on Dynamics of Gear System Featuring Confluence Transmission; Cascade Controller Design for Compliant Actuators; Position Error Research of Four-Legged Walking Robot's Swing Leg Effect of Filling with Adhesive on Solder Alloys Subjected to Random Vibration Research on Optical Microscope Measuring Method of External Thread Parameters Based on Charge-Couple Device; Structure Analysis and Design of Coal Mine Refuge Chamber; Operation Sequencing Using Genetic Algorithm; Large SAR Antenna Deployable Structure Design and Optimization; Safety Analysis of Tower Crane

Based on Fault Tree; The Effects of Bony Structure Simplification Methods on the Biomechanics of Tibiofemoral Joint in Series of Flexion Angles

Dynamic Simulation of the Six Axis Machining Robot for Trajectory Planning in CATIA-LMS Research Trends of Mechanism and Machine Theory Using Bibliometrics; The Classification of Disposable Mechanical Elements; Dynamic Analysis of Extendible Support Structure Deployment; Investigation of Tool Deflection of Solid Carbide End Mill in Cutting Process; An Experimental Study to Determine the Optimal Sizes for Ball-Valve Micropump Channel; Ejector Influence on Performance of Ammonia Absorption Heat Pump System; Dynamic Analysis and Design of Compliant Mechanisms Using the Finite Element Method

Parts Tolerance Allocation Based on Assembly Clearance Analysis and Product Functional Parameters A Citrix Xen App and Web Based System for Product Design and Management; Development of Flapping Ornithopters by Precision Injection Molding; Improved Method Based on Fluid Mechanics Analysis for Buoy Gauge Design and Experimental Research; The Research of Linear Rotation-Axis Control Machining CNC Rotary Cam Surface Transformation; Development of KM-Based Multi-Criteria Decision-Making Method for Evaluation of 4-Axis CNC Machine Tool

Inverse Identification of Elastic Constants of Orthotropic Plates Using the Dispersion of Guided Waves and Artificial Neural Network Revival of 1920's Belt-Driven Machine Tools with Virtual Reality; Assembly Unit Partition Based on Theory of Cut-Set; The Design of 8-Link Mechanism of Horse Leg-Like Moving; Research on Automatic Design of Extendable Truss Based on CAD Software; The Research about Energy Consumption and Using Motion Function of Mass Center for Four-Legged Walking Robot; Multi-Dimensional Data Model and Version Control Method for Small-Batch Production

Teaching Assistants Role in the Project-Based Learning Model for Electromechanical Control Engineering

---

#### Sommario/riassunto

The present volume consists of selected papers from the proceedings of the International Conference on History of Mechanical Technology and Mechanical Design -2012 (ICHMTMD 2012). This conference evolved from the China-Japan International Conference on History of Mechanical Technology (CJICHMT). More than 100 papers, from Mainland China, Taiwan and Japan were submitted, to the present conference. All of the papers were subjected to peer review by at least two expert referees, and the best papers were selected for publication in this volume. Review from Book News Inc.: This work presents 56 sele

---