

Mechanical Engineering and Green Manufacturing

Part 2

Edited by
Shengyi Li, Yingchun Liu, Rongbo Zhu,
Hongguang Li, Wensi Ding

Mechanical Engineering and Green Manufacturing

PART 2

Selected, peer reviewed papers from the International Conference on
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November 19-22, 2010, in Xiangtan, China

Edited by

Shengyi Li, Yingchun Liu, Rongbo Zhu,
Hongguang Li, Wensi Ding



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PREFACE

Dear Distinguished Delegates and Guests,

International Conference on Mechanical Engineering and Green Manufacturing 2010 (MEGM 2010) was held in Hunan Institution of Engineering in Xiangtan, China, from November 19-22, 2010, serving as a platform for expertise exchange. MEGM 2010 had drawn the attention of researchers from various disciplines: Mechanical Engineering Design, Green Manufacturing Technology, Applied Mechanics, Sustainable Materials, etc.

Persons who attended the conference were engineers, scientists, managers of various companies and professors of the universities abroad and home. There were a very large number of paper submissions (941) this year. All submissions were reviewed by at least two Program or Technical Committee members or external reviewers. It was extremely difficult to select the presentations for the conference because there were so many excellent and interesting submissions. In order to allocate as many papers as possible and keep the high quality of the conference, we finally decided to accept 390 papers, which have been accepted for presentation at the conference and will be published by TTP, in Applied Mechanics and Materials (AMM) Journal (ISSN: 1660-9336), and is online available in full text via the platform www.scientific.net. AMM should be indexed by EI according the previous TTP index results. We believe that all of these papers and topics not only provided novel ideas, new results, work in progress and state-of-the-art techniques in this field, but also stimulated the future research activities in the area of mechanical engineering and green manufacturing.

There is one keynote speech. The keynote speech is kindly provided by Professor G. Meng (Shanghai Jiao Tong University, China), on field of "Rotor dynamics of rotating machinery", "Vibration theory and vibration control", "Intelligent mechanical, structural and control". He is internationally recognized experts in his research fields, who have demonstrated outstanding proficiency and have achieved distinction in their profession.

We express our special gratitude to all the members of the General Committee Chairs, Program Committee Chairs, Technical Program Committee and Steering Committee who worked so hard to prepare the conference and who supported the conference so professionally.

Our deep thanks also go to the sponsors: National Natural Science Foundation of China, Shanghai Jiao Tong University, South China University of Technology, National University of Defense Technology, Central South University (CSU), Hunan University, Xiangtan University, Hunan University of Science and Technology, Hunan Institute of Engineering as was as the organizers: Hunan Institute of Engineering, Hunan University of Science and Technology and Trans tech publications inc. their kind support in making MEGM 2010 possible.

Finally, we would like to thanks all the authors, speakers and participants of this conference for taking part in and contributing to the International Conference on Mechanical Engineering and Green Manufacturing 2010.

We hope you have a unique, rewarding and enjoyable week at MEGM 2010 in Xiangtan.

With our warmest regards,

MEGM2010 Organizing Committees

November 19-22, 2010

Xiangtan, China

Table of Contents

Reviewers	v
Committees	viii
Preface	xi

PART 1

Study on Composite Material Mechanics Model of the Cement Loop Damage Mechanism in Destroyed Casing Well M.Z. Jiang, Y.X. Dai, G.L. Zhou and Y.P. Cao	1
Gear Reliability Design Using Probability Finite Element Method Based on Response Surface S.X. Sun, M. Yan, P. Bai and L. Han	7
Collaborative Optimization for the Cold Extrusion Die and Process Parameters of Wheel Hub Bearing Rings B. Meng, H.W. Wu, G.J. Bao and Q.H. Yang	13
Influence Factors on the Junction Line Entering for High-Temperature Alloys in Resistance Seam Welding Y.P. Chen, W. He and F.Q. Zhu	19
Stochastic Finite Element of Structural Vibration Based on Sensitivity Analysis W.H. Mo	25
Analysis of Weld Formation Mechanism and Weld Pool Dynamic during Moving Laser-MIG Hybrid Welding Z.G. Gao	33
Numerical Analysis for Dynamic Characteristics of New Launcher with Coupled Rigid and Flexible Motion Y.Z. Wang	44
Optimal Design of Drive System in Wind Power Generation Acceleration Gearbox Based on Matlab S.B. Yang, J.F. Zhang, J.G. Wang and X.Q. Deng	50
The Optimum Design for the New-Typed Auto-Eliminate Backlash Mechanism in Gear Transmission Q.Q. Liu, Z.F. Xiang, J.G. Wang and J. Wu	57
Optimal Design of Structural Vibrationbased on Stochastic Finite Element W.H. Mo	65
Inverse Mode Problem in the Discrete Model of Circular Plate Axial Symmetry Vibration Q.S. Wang, Y. Wang and L.H. Zhang	71
Research on Evaluation Index System for Green Manufacturing Based on PSR Model and Life Cycle Q.S. Wang, X.L. Yuan, D.Y. Cao, C.Y. Ma and K. Zhang	79
Temporal Inference and Simulation in Collaborative Design Process Based on Time Petri Net Y.Z. Guo and J.C. Zeng	85
T-S Fuzzy Model-Based Fault Diagnosis of PEM Fuel Cell Engine R. Quan, S.H. Quan and L. Huang	92
A Study on Objective Functions for Springback Control in Multi-Objective Optimization of Sheet Metal Forming Process X.A. Yang and F. Ruan	98

Strength Analysis of Dual-Chamber Hydrodynamic Coupling Based on One Way FSI
D.S. Zhang, J.Y. Zhao, Z. Xu and Z.X. Wang105

Study on the Difference of Frontal Impact Response among People of Different Sizes
L.B. Cao, C.Z. Cui, N.Y. Zhu and H. Chen111

Streaming Potential Induced by Canaliculi Fluid Flow: A Fluid-Filled Thick-Walled Cylinder Osteon Model Subjected to Axial Loading
X.G. Wu and W.Y. Chen117

Analytical Analysis Method for Number of Spare Parts of Typical Systems
J. Xing, P. Bo and L. Hai123

Design and Implementation of Two Axis Tool Table Control
L. Kang, L. Yang, J. Yang and Y. Li131

Design and Implementation of Device Cooperation Middleware for Earthquake Precursor
P. Deng, J.W. Zhang, H.Y. Liu and M. Jia137

A Spatial 3-DOF Translational Compliant Parallel Manipulator
D.C. Zhu and Y.P. Feng143

Application and Non-Homogeneous Index Grey Model NIGM(1,1,k)
Z.M. He, Y.X. Luo and B. Zeng148

Analysis and Improvement of Random Number Generating Algorithm
Y.F. Li and Q.F. Zhao153

Fusion Method for True Value Estimation of Manufacturing Quality under Condition of Poor Information (Part I: Theory)
X.T. Xia, L.L. Gao and J.F. Chen157

Fusion Method for True Value Estimation of Manufacturing Quality under Condition of Poor Information (Part II: Experiment)
X.T. Xia, J.F. Chen and L.L. Gao162

Performances of the Hybrid Active Desiccant Wheel System with Type III Desiccant
Y.Z. Zuo, S.L. Wen and X.Y. Li167

Surface Analysis of Electrical Arc Residues in Fire Investigation
Y. Wu, W. Gao, M. Di and C.Z. Zhao172

Research on a Kind of New Green Precision and Micro-Manufacturing Technology
H.Q. Bao, C.T. Wang and B.K. Han177

An Experimental Study on Oil-Air Lubrication of Sliding Friction Element
L. Cai, J.L. Wang and H.T. Zheng181

An Approach for Construction of Fault Trees Using Rough Set and Fuzzy Clustering Algorithm
J.L. Tu, R.X. Duan and D.C. Dong186

Design on Parameterized Drafting System of Centrifugal Fan
J. Zhu, L.M. Chen and P.Y. Xi192

Semi-Rigid Analysis of Extended End Plate Connections Based on Correlation and Sensitivity
J.R. Pan, Z. Wang, C. Su and L. Wang197

Finite Element Analysis of C Axis of High-Power Direct-Drive Bi-Rotary Milling Head
M. Yan, P. Zheng, Y. Li and X.F. Gao202

Finite Element Analysis on Structural Stress of 8×8 InSb Infrared Focal Plane Array
Q.D. Meng, X.L. Zhang, X.L. Zhang and W.G. Sun207

Finite Element Analysis on Structural Stress of 64×64 InSb Infrared Focal Plane Array
Q.D. Meng, X.L. Zhang, X.L. Zhang and W.G. Sun212

Real-Time Soft Shadow Generating in Three-Dimensional Scene
X. Lei, C. Liu and X.L. Qu217

For the Shipbuilding Enterprise Model of Intelligent Recommendation Services W. Zhang, X.H. Pan and X.K. Fang	222
Study on Aging Characteristics of Warm Mix Asphalt: Using Softening Point as a Parameter of the Aging Kinetics Model J.P. Zhang, J.Z. Pei, S.C. Xu and Y.F. Bi	227
Analysis of the Gearing Theoretic between Plastic Helical Gear and Steel Worm Y.S. Hao, B.N. Yue and X.X. Zhu	232
Experimental Study on Slab Track Passenger Transportation Special Line Roadbed Power Response M.Y. Ma, K. Wu and C.H. Gu	238
Weld Performance of Joint of Beam to CFST Column with Interior Strengthening Ring J.R. Pan, Z. Wang and X.S. Sun	242
Simulation Research of Saw Angle Adjustment System for Sliding Table Saw Based on MATLAB P.L. Cheng, Y.S. Tan and Y.D. Xu	247
Study on Two Kinds of Pneumatic Booster Valves Y. Shi, M.L. Cai and P.P. Liao	252
The Effects of the ACL Reconstruction Tunnel(s) on Patellofemoral Contact R.Y. Huang, Q. Xu and Y.G. Xu	260
Adaptive Multiple Impedance Control Based on Passivity W.J. Li, B.L. An and H.K. Zhang	265
Solution for a New Sub-Problem in Screw Theory and its' Application in the Inverse Kinematics of a Manipulator Y.S. Tan, P.L. Cheng and A.P. Xiao	271
The Complex Dynamical Behaviors of Lateral Vibration of Tire Y. Li, S.G. Zuo, L. Lei, X.W. Yang and X.D. Wu	276
Investigation on Machining Characteristics for Tangential Ultrasonic Vibration Assisted Grinding W.F. Lang and H.L. Zhang	282
Numerical Analysis of Structural Reinforced Concrete Elements under Severe Impulsive Loads W.B. Sun	287
Investigation of the Tribological Properties of Si₃N₄ Ceramic Pair Lubricated by Emulsion with Different Functional Group Z.Y. Wu, S.H. Wang, X.L. Tian and S. Zhang	292
A Peak Identification Method of Vibration Signal on Diesel Engine Cylinder Head in the Absence of TDC Signal Z.Q. Zhu, W.M. Zhang, X.M. Zhang and Y.P. Shi	296
Misfire Diagnosis of Diesel Engine Based on Short-Time Vibration Characters Z.Q. Zhu, J. Yang, X.M. Zhang and X.L. Li	301
The FNN Quilting Process Deformation Prediction Model L.X. Tang, B. Bin and K. Han	306
Study on the Intelligent Controller of DTC System at Low Speed W.P. Cui, Y. Liu and X.L. Qu	311
Evolutionary Optimization on Turning Linkage of Automobile in Simulated Annealing F. Chen and J. Zhu	317
Design and Experiment Research of a Non-Contact Optical Fiber F-P Ultrasound Sensor for Detecting Surface Defects N. Shan	322

Carbonation Test Study on Low Calcium Fly Ash Concrete H. Xu, Z.Q. Chen, S.B. Li, W. Huang and D. Ma	327
Rolling Element Bearing Condition Monitoring and Diagnosis H.B. Lin and K. Ding	332
Researches into Influence of Process Parameters on FDM Parts Precision A.H. Peng and Z.M. Wang	338
Co-Service Manufacturing System Integrated OPC UA/FDT for Complex Equipments & Field Devices B. Shen, D.J. Qi, L.Q. Fan and H. Meier	344
Microstructure and Properties of Super Plastic Diffusion Bonded 00Cr25Ni7Mo3N Duplex Stainless Steel Joint X.H. Chen, C.X. Jiang, X.P. Ren, H.L. Hou and H.J. Li	350
Thermal Cracking Meso-Characteristic of LuHui Granite Y. Zhang and Y.S. Zhao	355
Study on Simulation Reliability Test of Machining Center X.P. Zhang, J.Z. Shang and Z. Wang	360
Element Characterization of AlZnO by Laser Induced Breakdown Spectroscopy (LIBS) D.Q. Yuan, M. Zhou and J.T. Xu	365
Geometrically Nonlinear Analysis of Long Span Composite Girder Cable-Stayed Bridge with Three Towers under Live Load M.Y. Liu and F. Wang	371
Numerical Investigation on Aerodynamic Performance for Guiding VAWT with Combined Blades Q.K. Wang	376
Elasto-Plastic Cellular Automaton Simulation of Fracturing Process in Single Pre-Fractured Rocks under Uniaxial Compression H.Y. Yao and P.Z. Pan	383
Reliability Analysis of Supply Chain Based on GO Methodology X.L. Ren and G.B. Zhang	387
An Elastic Dynamic Analysis of a Nonhomogeneous Moderately Thick Plate Using the Meshless Local Petrov-Galerkin Method P. Xia, W.G. Mao and W.J. Hu	393
Crashworthiness Optimization Using Response Surface Method Based on Uniform Design T. Yoshino, T. Xu, T.S. Xu and P. Cheng	399
Research of Simplified B Pillar Model for Roof Crashworthiness T. Xu, L. Hao, Y.W. Li and Q. Li	404
Investigations on Twisted Blade for Axial Microfan Q.K. Wang	410
Optimization of Generator Structure and Additional Anode Access Method of MDAM System X.L. Tian, J.F. Yang, B.G. Zhang, F. Guo, Y.T. Mao and A.B. Yu	417
Dynamic Properties Analysis of Electromagnetic Gear Driving System H.H. Chen and J. Chen	422
The Interaction between a Dislocation and Circular Inhomogeneity in 1D Hexagonal Quasicrystals Y.Q. Hu, P. Xia and K.X. Wei	429
Thermal Paints Color-Temperature Intelligent Interpretation C.W. Ma	435

Discharge Flow Ripple of Axial Piston Pump with Conical Cylinder Block L. Lei, K. Jian, J. Xu and W. Yong.....	440
Chaotic Calculation and Prediction on Volume Deformation of MgO Concrete Based on Lyapunov Exponent J.W. Song and X.P. Cai.....	446
Modeling and Simulation of PCB Assembly under Board-Level Drop Impact F. Liu and G. Meng.....	451
Defect Detection in Seven-Wire Steel Strands Using Single Magnetostrictive Transducer with Two-Layer Coil Z.H. Liu, J.C. Zhao, B. Wu and C.F. He.....	456
Artificial Neural Network Analysis Method of Concrete Performance Based on Virtual Data Samples J.W. Song and Y. Shi.....	462
Study on Bifurcation of Rigid Rotor Roller Bearings System Considering Nonlinear Dynamic Behavior L. Cui and J.R. Zheng.....	467
The Study of Corner Echo Inspection with Bulk and Creeping Waves Effect in Ultrasonic Testing P. Ding, F.Z. Lv and Z.Q. Xiang.....	472
A Novel 3-D Topography Model for Micro-Manufacturing Process Simulations D.L. Xu and J. Zhang.....	477
Behavior-Based Fuzzy Control of Obstacle Avoidance for Indoor Mobile Robot D.H. Chen and Y.M. Liang.....	482
Intelligent Fault Diagnosis Method Based on Reliability Analysis R.X. Duan, J.L. Tu and D.C. Dong.....	487
Study on Discharge Characteristics of Piezoelectric Self-Adaptive Micro-EDM System Y.J. Zhu, Q.H. Zhang, X.Z. Fu and G.H. Bao.....	492
A Fast Collision Detection Algorithm in Virtual NC Machine Tool J.X. Tian, Z. Liao and X. Lei.....	497
Optimization of Maximum Entropy Model of Bayesian Prior Distribution Based on HPSO Z.M. Wang and Y. Dai.....	502
Modeling and Estimating Thermal Error in Precision Machine Spindles J. Han, L.P. Wang and L.Q. Yu.....	507
A New Vehicle Speed Estimation Method Based on the Longest Radial Crack on Windshield J. Xu, M.Y. Zhu, B.H. Liu, Y.T. Sun and Y.B. Li.....	512
Study on an Integrated Child Safety Seat L.B. Cao, H. Chen, X.J. Ren and Z.G. Ouyang.....	517
Modeling and Simulation of Hydraulic AGC System for 1100mm Cold Rolling Mill Q.M. Gao, J.F. Li and G.Q. Zhao.....	523
Measures for Improving Reliability of the Machining Center X.P. Zhang, J.Z. Shang and Z. Wang.....	527
Experimental Investigation on Dynamic Characteristics of a FEAD System: Affected by Serpentine Belt Length X.K. Zeng and W.B. Shanguan.....	533
The Application of Pseudo-Excitation Method to the Ride Comfort Research of Wheel-Loader C.Y. Chi, S.C. Qin, D.W. Yu and W.J. Zhang.....	538

Optimization of the Rollers System of Aluminum Strip Rolling Mill Based on the Stochastic Vibration	
B.Y. Xu, Y.L. Liu, X.D. Wang, F. Dong and Z.C. Kang.....	544
Proposal of Power Determination and Measurement of Compressible Air	
C. Liu and M.L. Cai	551
The Comparison of Isotropic and Anisotropic Diffusion Techniques for Image Denoising	
C.Y. Liu, C.Y. Zhang, H.Z. Yuan and X.L. Qu	557
Design and Optimization of High-Viscosity and High-Density Drilling Fluid Separation System	
R.B. Xu, X.G. Liu and F.Q. Tu.....	562
Transient Thermal Analysis of Spiral Bevel Gears under Loss of Lubrication	
Y.T. Yan, Z.L. Sun and R.J. Guo.....	566
A Trajectory Privacy Preserving Method in Peer-to-Peer LBS System	
Y.H. Guo, Y.M. Guo, Y.J. Guo and C.M. Wang	571
Boiling in Microchannels with Refrigerant Mixtures	
Z.C. Hu, H.G. Ma, X.N. Song and Q. Wang.....	576
Static and Dynamic Characteristic Analysis of XDK650X Engraving and Milling Machine	
S.G. Chen, H.L. Zhao, Z.H. Wu, G.P. Zhang, B. Wang and Q.F. Wang.....	582
Research on the Degradation of VOCs under Visible Light Irradiation Via Nano-Coating	
J.Y. He and K.J. Wang.....	587
Computer Simulation on Intensity Distribution of UV Irradiation System	
J.Y. He and Z.P. He.....	591
Virtual Fatigue Test of Auto Parts Based on Non-Structural Road Driving Simulation	
N. Cong, X. Chen, J.Z. Shang and K.S. Liang.....	595
Research on Optimization of Air Blowing System	
W.Q. Xu and M.L. Cai.....	600
Based on Continual Development of Remanufacture for Heavy Duty Caterpillar Engines and its Remanufacturing Technology	
Z.H. Cai, P. Zhang and Z.J. Liang	605
Mechanical and Tribological Properties of Multi-Element CrTiAlN Coatings for Dry Cutting Deposited by Magnetron Sputtering Technologies	
Z.H. Cai, P. Zhang and J.W. He.....	610
Tool Overhang Effect on Cutting Force in High Speed Milling	
Z.Y. Zhao, Y.B. Du, L.M. Zhang and B. Liu.....	616
Analysis of Structure Capital Impact on Knowledge Flow within Supply Chain	
F.B. Lu and W.Y. Zhang.....	621
Design and Implementation of Data Interchange Platform for Earthquake Precursors	
P. Deng, J.W. Zhang and Q. Gong.....	626
Modeling and Analysis of Process Parameters on State Variables in WEDM of TiB₂ Nanocomposite Ceramic	
M. Reza, S. Yazdi, H. Dehghan and H. Amini	631
Experimental Study of Dynamic Fracture Behavior of PVB Laminated Glass by High-Speed Photography	
M.Y. Zhu, B.H. Liu, Y.T. Sun, J. Xu, X.F. Yao and Y.B. Li	636
Numerical Simulation of Riveting Process	
H.S. Zhang	641
Parameters and Experiments on the Precision Forming Process of Spline Cold Rolling	
Z.Q. Liu, J.L. Song, H.P. Qi, Y.T. Li and X.D. Li.....	646