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In Service Detection of 45 Steel’s Rotary Bending Fatigue Damage Based on Metal Magnetic Memory Technique
M.X. Xu, M.Q. Xu, J.W. Li, J.C. Leng and S.A. Zhao

Tower Type Sensors for Monitoring Corrosion Risk in Cover-Zone Concrete
S. Lu, H.J. Ba, A.J. Wang and Y.Z. Yang

Intelligent Moisture Controlling System for Molding Sand
H.R. Xiao and W.W. Zhang

The Technique of Online Measurement and Data Processing for Aspheric Machining
L.Y. He, Y.B. Guo, H. Huang, Z. Wang and J. Wang

Calibration and Registration for Inspection Robot with Contact Probe
Y.Q. Chen, J. Huang, H.P. Xu and Z. Ma

Device and Method for Large Size Aspheric Measurement
Y.L. Zhu, Y.B. Guo, X.L. Ke and L.S. Chen

Experimental Modal Analysis of Roller Gap Sensor Structure on Hot Rolling Mill
W.J. Ma, J.Y. Wang, F.L. Li, S.B. Xiong, Z.Q. Zeng and H.Q. Liu

Development of Novel High Precision Angular Displacement Sensor
L. Hua, H. Feng and J.P. Gu

Post-Weld Quality Inspection for CO₂ Laser Tailored Blank Welding with Vision Sensor
Y.Y. Zou, M.Y. Zhao and L.Z. Liu

The compact Platform for In Situ Nanoindentation and Scratch Test

Visual Integrated Measurement on Geometry Parameters of Circular Saw Blade
Q.M. Liu, L. Zhao and W.F. Dai

Research on Measuring Path and Surface Fitting Algorithm for Non-Axisymmetric Aspheric
K. Pan, Y.B. Guo, X.L. Ke and S.H. Zhang

Research on Quality Evaluation System of Dynamic Alliance Based on Life-Cycle
S.J. Zhang and C.L. Yang

Study of Simulation Tester for Key Rubbing Pairs in Internal-Combustion Engine
X.P. Yan, C.Q. Yuan, Z.L. Liu, C.Q. Zong and X.Q. Bai

Detection of Unbonds in Honeycomb Sandwich Structure Using Lock-In Thermography
H. Liu, J.Y. Liu, Y. Wang and H.J. Li
The Design of VI-Based Synthesized Testing System for Belt Conveyors
W.J. Meng and W. Peng

Fast Location of Thermal Target with Low Offset and Spatial Filter of Winner-Take-All Circuit
J.Q. Wang, S.J. Chen and C.H. Shen

Characteristics Identification of Overlapping Vibration Signals on Mallat
H. Sun, Z.J. Yang, Q.L. Liang and X.Y. Pang

Study on the Disturbance of Rotor-Bearing System Caused by Circumferential Loading Torque
Q.L. Liang, Z.J. Yang, H. Sun and X.Y. Pang

Study on the Measuring System of the Planar Parallel Micro-Motion Worktable’s Location and Orientation
Z.G. Huang, P.G. Liu and X.F. Cheng

Surface Roughness Pattern Measurement of Tensile Specimen by Using Digital Holography
K.S. Kim, D.P. Hong, M.Y. Choi, H.C. Jung, D.S. Kim, S.W. La and H.S. Chang

CHAPTER 24: Other Related Topics

The Finite Element Analysis of the End Anchorage under Larger Prestressing Load in Rehabilitation Engineering
F.X. Huang, H.B. Jiang, C.G. Wei, S.W. Ouyang and X. Long

Research on Decision-Making Model for Mechanical Motion Scheme
A.H. Peng

The Study on Optimal Matching of Power System of Hybrid Hydraulic TLT
L.J. Zhao, G.J. Li and J.H. Jiang

Study on Edge Detection Technique in Material Bag Image
T.H. Zhang, C.C. Li and S.F. Wang

The Design of New Type Muffler Used For Steam Turbine’s Exhaust Device
J.H. Yao

Reliability Analysis of Prestressed Steel Structure in Regards to Temperature Action
Z.S. Liu and Z.H. Chen

The Design of Mechanical System for Harbor Basin Wave Maker
S.J. Wang, L.L. Luan, R.S. Song and J.Y. Li

Product Development Oriented Knowledge Management
J. Hao, Y. Yan, J.J. Lin, L.C. Hu and M. Zhang

Exploiting Critical Path Method for Evaluation of Conceptual Design
M.Y. Wang, L.G. Shen and Y.M. Deng

Efficiency- Reinforcement Technology Study for Hydraulic Reciprocating Sealing Based on TRIZ S-Field Analysis
F.Y. Zhang, Q.Q. Zhang and P. Wang

The Principle Studies of Series Multistage Axial Ram Pumps and the Fluctuation Analyses
D.S. Wen, Y.Z. Zhang, J.B. Sun, L.B. Du, Y.A. Li, S.J. Lv, P. Yang and Y.S. Liu

Structure Buckling Non-Probabilistic Reliability Index Calculation of Ventilated Supercavitating Vehicles
L. Zhou, W.G. An and H. An

The Analysis of Failure Induced by Manufacturing Defect in Cu-30Ni Alloy Condenser Tube to Improve the Finished Product
X.Y. Mao, F. Fang, J.Q. Jiang and R.S. Tan

Detection of Small Damage of Beam Structures Based on the Slope of Proper Orthogonal Mode
D.S. Wang, Y.B. Zhang, H.P. Yang and H.P. Zhu

Fuzzy Pattern Recognition of Steelmaking Process for Converter
Q. Zhao, M. Zhang, J. Li and Y.R. Chen

Study on Impinging Streams Reactor for Sewage Purification
F.B. Li, H.L. Wang, Q. Li and D.X. Wang

Analysis on Cutting Ability of Picks on Continuous Miner
Y.L. Cao, X.H. Li, Y.D. Shà and H.M. Liu
New Type of Cantilever Crane for High-Speed Railway Track Plate Constructions
Y.H. Zhang, C.B. Zhao and S.T. Chen

Study on a Capacitive Micro-Mechanic Gyroscope
Y.B. Shi, Q.L. Tan, Q. Zhang and J. Liu

Development of the Self-Adaptive Pipeline Cleaning Robot
Z.X. Li, Z.H. Li, Y. Li and W. Wang

Self-Adaptive Suppression of the Euler Beam Remnant Vibration Using the Interior Inlay Viscous Fluid Unit Method
D. Jing and H. Xu

Research on Tempering Process of LZ20Mn2 Seamless Pipe for Axle
Z.G. Huang, H.L. Dong, Q.H. Yuan, J. Song and J. Fan

Study of a Novel Approach of Active On-Line Balancing Device for High-Speed Spindle System
S.L. Ma, P. Dai, Q.S. Ma and H. Xu

Research on Fatigue Damage of Ferromagnetic Material by Metal Magnetic Memory Methods

Analysis of the Hydrodynamic Effect in Laser-Textured Mechanical Seal Faces

The Realization of Monitoring System for Stacking Crane Using Plotting Finite State Machine
L. Li, X.P. Liao and X.B. He

Simulation and Experiment for Rigid and Flexible Wings of Flapping-Wings Microrobots
L. Liu and Z.X. He

A Passivity-Based Approach to the Rotor Resistance Estimation and Sliding Mode Control for Induction Motors
J.Y. Chen and B.Y. Lee

Tri-Objective Optimization in Production Based on Stochastic Principle
L. Hong and J.J. Yu

Effect of Grinding Wheel Diameter Change on Geometrical Parameters of Ball-Nose End Mill
L. He, L.M. Sun, X.F. Zhao and J. Wang

Dynamic Analysis on Noise and Vibration Study of Flexible Wiper Blade System
M.A. Salim, A. Noordin, M.Z. Md Zain and A.R. Abu Bakar

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