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Biomimetic Materials on Industry Design Research; The Curved Surface Fitting and Optimization of Scattered Points' Data Based on the Given Surface Tolerance and Fairing; The Derivation and Simulation of Curved Tooth Face Gear Tooth Theoretical Contract-Point Trace Line Equations
The Influence of the Laser Cutting System Performance on Cutting QualityThe Research of the Epicycloids Bevel Gear Cutting Based on the Common Six-Axis Machine; The Vibration Isolation Effect Research of the Floating Raft Isolation System Based on the Adjustable Flexibility of Foundation; Track Smoothness of Moving Axis Considering Kinematical Characteristics of Machine Tool; Numerical Simulation of Hydro-Forming Process of Shaped Tube; Chapter 2: Control, Automation and Detection Systems; Development of Off-Line Inspection System on Equipment Based on Embedded Linux Technique
Design and Implementation of Online Monitoring and Remote Diagnostic System for CNC Machine ToolsThe Research on Modular Adaptable Design Platform for Non-Standard Waste Detection Equipment; Centralized Monitoring Method for Isomeric Heat Treatment Equipments; Dynamics Analysis of ADCP Carrier and its Mooring System; Improved Local Mean Decomposition and its Application to Fault Diagnosis of Train Bearing; Online Monitoring Recognition Theory Based on the Time Series of Chatter; Research on Agricultural Harvester Data Detection System Based on Remote Monitoring
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Sommario/riassunto

The special topic volume communicates the latest progress and research results of new theory, new technology, method, equipment and so on in Engineering Technology, and to grasp the updated technological and research trends in internationally. The major topics covered by the special volumes include Advanced Materials and Manufacturing Technologies, Control, Automation and Detection Systems, Advanced Design Technology, Optimization and Modeling. In 80 invited and peer-reviewed papers, mechanical and other engineers describe their recent and current research and results in advanced materials and