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## In Memoriam

### In Memoriam—Klaus J. Weinmann

John W. Sutherland

*J. Manuf. Sci.*

*Eng.*. 2010;132(6):060101-060101-1.

doi:10.1115/1.4003166.

## Research Papers

### Three-Dimensional Numerical Simulation and Experimental Study of Sheet Metal Bending by Laser Peen Forming

Yongxiang Hu, Yefei Han, Zhenqiang Yao and Jun Hu

*J. Manuf. Sci.*

*Eng.*. 2010;132(6):061001-061001-10.

doi:10.1115/1.4002585.

## Calibration of Modular Reconfigurable Robots Based

### on a Hybrid Search Method

Yu Lin, Fengfeng Xi, Richard Phillip Mohamed and Xiao-wei Tu

*J. Manuf. Sci.*

*Eng.*. 2010;132(6):061002-061002-8.

doi:10.1115/1.4002586.

## Automatic 3D Spiral Toolpath Generation for Single

### Point Incremental Forming

Rajiv Malhotra, N. V. Reddy and Jian Cao

*J. Manuf. Sci.*

*Eng.*. 2010;132(6):061003-061003-10.

doi:10.1115/1.4002544.

## Laser-Assisted Machining of a Fiber Reinforced Metal

### Matrix Composite

Chinmaya R. Dandekar and Yung C. Shin

*J. Manuf. Sci.*

*Eng.*. 2010;132(6):061004-061004-8.

doi:10.1115/1.4002548.

## Forming Limit and Fracture Mode of Microscale Laser

### Dynamic Forming

Ji Li, Huang Gao and Gary J. Cheng

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*J. Manuf. Sci.*

*Eng.*. 2010;132(6):061005-061005-10.  
doi:10.1115/1.4002546.

## Designing a Modular Rapid Manufacturing Process

Jacquelyn K. S. Nagel and Frank W. Liou

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*J. Manuf. Sci.*

*Eng.*. 2010;132(6):061006-061006-14.  
doi:10.1115/1.4002718.

## Optimization of Stirring Parameters Through

## Numerical Simulation for the Preparation of Aluminum Matrix Composite by Stir Casting Process

Hai Su, Wenli Gao, Hui Zhang, Hongbo Liu, Jian Lu and Zheng Lu

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*J. Manuf. Sci.*

*Eng.*. 2010;132(6):061007-061007-7.  
doi:10.1115/1.4002851.

## A Multifeature Approach to Tool Wear Estimation Using

## 3D Workpiece Surface Texture Parameters

Yi Liao, David A. Stephenson and Jun Ni

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*J. Manuf. Sci.*

*Eng.*. 2010;132(6):061008-061008-7.  
doi:10.1115/1.4002852.

## Effects of Temperature on Laser Shock Induced Plastic

## Deformation: The Case of Copper

Chang Ye and Gary J. Cheng

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*J. Manuf. Sci.*

*Eng.*. 2010;132(6):061009-061009-8.  
doi:10.1115/1.4002849.

## Parametric Study on Single Shot and Overlapping Laser

## Shock Peening on Various Metals via Modeling and Experiments

Yunfeng Cao, Yung C. Shin and Benxin Wu

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*J. Manuf. Sci.*

*Eng.*. 2010;132(6):061010-061010-10.  
doi:10.1115/1.4002850.

## Effective Determination of Feed Direction and Tool

## Orientation in Five-Axis Flat-End Milling

M. Javad Barakchi Fard and Hsi-Yung Feng

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*J. Manuf. Sci.*

*Eng.*. 2010;132(6):061011-061011-10.  
doi:10.1115/1.4002766.

## Ultrafast Laser Induced Structural Modification of

## Fused Silica—Part I: Feature Formation Mechanisms

Siniša Vukelić, Panjawat Kongsuwan and Y. Lawrence Yao

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*J. Manuf. Sci.*

*Eng.*. 2010;132(6):061012-061012-8.

doi:10.1115/1.4002767.

## Ultrafast Laser Induced Structural Modification of Fused Silica—Part II: Spatially Resolved and Decomposed Raman Spectral Analysis

Siniša Vukelić, Panjawat Kongsuwan, Sunmin Ryu and Y. Lawrence Yao

*J. Manuf. Sci.*

*Eng.*. 2010;132(6):061013-061013-9.

doi:10.1115/1.4002768.

## Process Using GONNS

M. R. Morovvati, B. Mollaei-Dariani and M. Haddadzadeh

*J. Manuf. Sci.*

*Eng.*. 2010;132(6):061014-061014-10.

doi:10.1115/1.4003121.

## Pin-Type Tooling

Troels H. Pedersen and Torben A. Lenau

*J. Manuf. Sci.*

*Eng.*. 2010;132(6):061015-061015-10.

doi:10.1115/1.4003122.

## Kinematic Machines With an Adjustable Platform

Z. M. Bi and B. Kang

*J. Manuf. Sci.*

*Eng.*. 2010;132(6):061016-061016-9.

doi:10.1115/1.4003120.

## Alloys: Numerical Simulation and Experiments

Chang Ye and Gary J. Cheng

*J. Manuf. Sci.*

*Eng.*. 2010;132(6):061017-061017-7.

doi:10.1115/1.4003124.

## Accuracy and Repeatability by Reducing Kinematic Redundancy

Jeongmin Byun and C. R. Liu

*J. Manuf. Sci.*

*Eng.*. 2010;132(6):064501-064501-5.

doi:10.1115/1.4002186.

Jianzhong Ruan, Lie Tang, Frank W. Liou and Robert G. Landers

*J. Manuf. Sci.*

*Eng.*. 2010;132(6):064502-064502-6.

doi:10.1115/1.4002624.

## Initial Blank Optimization

## in Multilayer Deep Drawing

## Variable Geometry Casting of Concrete Elements Using

## Enhancement of Adaptability of Parallel

## Laser Shock Peening of Nanoparticles Integrated

## Technical Briefs

## Improving Chucking

## Direct Three-Dimensional Layer Metal Deposition

## In-Situ Shrinkage Sensor for Injection Molding

Rahul R. Panchal and David O. Kazmer

*J. Manuf. Sci.*

*Eng.*, 2010;132(6):064503-

064503-6.

doi:10.1115/1.4002765.

## Extrusion Fabrication Processes

Xiyue Zhao, Robert G. Landers and Ming C. Leu

*J. Manuf. Sci.*

*Eng.*, 2010;132(6):064504-

064504-9.

doi:10.1115/1.4003009.

## Using Electrochemical Method

Anna Brusilovski

*J. Manuf. Sci.*

*Eng.*, 2010;132(6):064505-

064505-3.

doi:10.1115/1.4003123.

## Adaptive Extrusion Force Control of Freeze-Form

## Dielectric Coating of Cathodes for Microfabrication

## Errata

## Erratum: Experimental and Numerical Characterization of the Cyclic Thermomechanical Behavior of a High Temperature Forming Tool Alloy [ASME J. Manuf. Sci. Eng., 2010, 132, p. 051013]

Aditya A. Deshpande, Sean B. Leen and Thomas H. Hyde

*J. Manuf. Sci.*

*Eng.*, 2010;132(6):067001-

067001-1.

doi:10.1115/1.4003126.