INTRODUCTION

WTC2005-63074
Direct Observations of Emulsion Flow in EHL Contact
Haixia Yang, Steven R. Schmid, Ronald A. Reich, and Thomas J. Kasum

WTC2005-63089
Investigation of Liquid Nitrogen Lubrication Effect in Cryogenic Machining
Shane Y. Hong

WTC2005-63093
Deep Rolling Efficiently Increases Fatigue Life
Karsten Roettger, Terry L. Jacobs, and Gerhard Wilcke

WTC2005-63133
Emulsion for Single Phase Alpha-Brass in Hot Rolling Process: Case Study
Xianguo Hu

WTC2005-63134
Analysis of Surface Roughness and Surface Texture Generated by Pulsating Flexible Magnetic Abrasive Brush (P-FMAB)
D. K. Singh, V. K. Jain, V. Raghuram, and R. Komanduri

WTC2005-63138
Effects of Solid Lubricants During Compression Tests
Jayanta Banerjee

WTC2005-63152
An Investigation on Machining Behaviour of Metal Matrix Composites by Using PCD Inserts
N. Muthu Krishnan, D. Vikram, S. Kaushik, and K. Prahalada Rao

WTC2005-63172
Evolution of Matt Surface Topography in Aluminium Pack Rolling
Hiroshi Utsunomiya, Michael P. F. Sutcliffe, Hugh R. Shercliff, Pete S. Bate, and Dan B. Miller

WTC2005-63267
Ceramic Rolls for Wires, Tubes and Sheets
Andreas Kailer and Thomas Hollstein

WTC2005-63296
An Approach to Predicting Evolution of Material Properties Near Surfaces With High Friction in Metal Forming
S. Alexandrov

WTC2005-63528
Determination of a Critical Forming Parameter for the Cross-Wedge Rolling of Tubes
Clint A. Morrow, Michael R. Lovell, and Qiang Li

WTC2005-63548
Simulation of the Tribological System in Sheet Metal Processes on the Micro Scale
R. Gruebler and P. Hora

WTC2005-63639
A Method to Predict Temperature Fields During Frictional Welding by Introducing the Heat Input Coefficient and the Heat Input Surface Transfer
T. T. Ikeshoji, A. Suzumura, A. Demura, and T. Yamazaki

WTC2005-63791
Tribological Properties of Ground Surfaces
Miroslav Babic
Wear of Coated Carbide Tools in the Ultra-Precision Machining of Stainless Steel
W. Y. H. Liew and X. Ding

A Novel Particulate-Fluid Lubricant for Environmentally Benign Forming Processes
M. Lovell, C. F. Higgs III, and A. J. Mobley

Dry Machinability of Aluminum Alloys
Iqbal Shareef, Manikandan Natarajan, and Oyelayo O. Ajayi

Studies of Machining Parameters of Al Alloy A-390 During Turning
Suresh Dhiman, Rakesh Sehgal, and S. K. Sharma

Effects of Asperity Shape on the Tribological Behaviour During Stamping of Zinc Coated Steel Sheets for Car Bodies
A. C. Cárcel and M. E. Rodilla

Vortex-Tube Cooling for Tool Wear Reduction in A390 Dry Machining
Jie Liu and Y. Kevin Chou

Multi-Scale Study of Abrasion Signature by 2D Wavelet Decomposition
H. Zahouani, S. Mezghani, R. Vargiolu, and M. Dursapt

Development of a Combined Analytical and Empirical Model for Beveling of Quartz Crystal Wafers
Chensong (Jonathan) Dong

Evaluation of Rheological Properties of Magnetorheological Polishing Fluid and Their Effect on Surface Finish in Ultra Precision Finishing Processes
Sunil Jha and V. K. Jain

Tribological Investigation of the Polymer-Based Lubrication System With Micropores Used in a Manufacturing Transfer Line
Simon C. Tung, Yong Huang, and Dennis C. Karczynski

The Influence of Friction Stability on the Success of Lubricated Stamping Operations: Predictive Tools From Plane Friction Tests
A. C. Cárcel and M. A. Pérez Puig

On the Tribological Effectiveness of Controlled Cutting Fluid Application in Machining With Coated Tools
Anshu D. Jayal and A. K. Balaji

Tribology of Coated Tools in High-Speed Machining: A Tool Wear and “Equivalent Toolface” Geometry Based Study
A. K. Balaji

Study on the Selection of Critical Electro Discharge Machining Surface Parameters Based on Robust Design of Experiments
C. Capela, M. C. Gaspar, N. O. Fernandes, and F. Gregório

Manufacturing Tribology in the Nano-Manufacturing Era
Ioan Marinescu