

Room 10

Session 3-10-1: OS11 Advanced machine tools and elements I

OS11-01 Fundamental Grinding Characteristics of Trial Manufactured Desktop Type Grinder
Masakazu Fujimoto, Yuki Inoue and Tomoya Yamamoto

OS11-02 Virtual Material Contact Model for Estimation of Vibration Characteristics of Jointed Structure
Reiji Hirasawa and Daisuke Kono

OS11-03 Estimation of Spindle Dynamic Compliance Using the Coil Current of a Contactless Electromagnetic Loading Device
Kai Iwai, Shuntaro Yamato and Atsushi Matsubara

OS11-04 Proposal and prototype design of a new machine tool configuration with multiple spindles
Kianoosh Rossoli and Soichi Ibaraki

GS13-04 Multi-Spindle Calibration for Thermal Error Compensation of Mill-Turn Machines
Lang Sebastian, F. Juliuc, M. Josef, W. Konrad and B. Markus

Session 3-10-2: OS11 Advanced machine tools and elements II

OS11-06 Chuck with integrated clamping force measurement for thin-walled workpieces
Berend Denkena, Henning Buhl, Eike Wnendt and Matthias Meier

OS11-07 Compensation of strain gauge signal changes due to position-based internal changes in sensory linear guides
Berend Denkena, H. Buhl, D. Kowalke, R. Ottermann and M. C. Wurz

OS11-08 Development of Machine Tool Spindle for Non-axisymmetric and Non-circular Inner Cylinder Machining
Masayuki Obata, Y. Morimoto, M. Oshima, A. Hayashi and K. Segawa

OS11-12 FEM Analysis for Torsional Stiffness of a Leaf-Spring Type Coupling Considering Contact Surface Characteristics
Yuta Kondo, R. Sato, E. Shamoto and T. Sasaki

OS11-13 Modeling of friction characteristics in feed drives and its application to dynamics prediction of machine tools
Yosuke Higuchi and Yasuhiro Kakinuma

Session 3-10-3: OS11/GS13 Advanced machine tools and elements III Machine tool metrology and calibration

OS11-16 Experimental study on temperature-dependent spindle vibration analysis with in-process measurements
Jihui Liu, S. Tanaka, Y. Liao, K. Nakanishi, S. Nakamura, T. Kizaki and N. Sugita

OS11-17 Study of technology for fine conditioning of pad surfaces with fiber conditioner in CMP
Haruki Hashimoto and Takashi Fujita

OS11-21 The improvement of thermal error modeling on machine tools by optimal selection of temperature measuring points
Lei Cao, Gyungho Khim, Seung-Kook Ro and Chun-Hong Park

OS11-11 Reduction of vibration during machining by applying cast iron with excellent damping properties to the structure
Taiji Yamada, S. Irako, T. Kizaki, N. Sugita, M. Sakada, T. Umetani and N. Kai

GS13-03 Analysis and modeling of volumetric error of ultra-precision grinding machine
Ruyue Wang, Y. Cai, S. Fu, H. Sun, X. Zhu, X. Guo, Z. Dong and R. Kang

Session 3-10-4: OS16 Science and applications of nanostructure formation

OS16-04 In-situ Calibration Method for Areal Surface Measurement Technique Based on Thickness Distribution of Fluorescent Liquid Film
Saeko Fujii, M. Yoshikawa, S. Masui, S. Kadoya, M. Michihata and S. Takahashi

OS16-03 Antibacterial Spectra of Nanosized Resin Pillars with Different Shapes
Satoka Matsumoto, S. Tanaka, H. Tatsuoka, M. Yoshii, T. Nagao, T. Shimizu, S. Shingubara and T. Ito

OS16-01 Fabrication of functional microstructures on Cu surface using solid-state anodic dissolution at the polymer electrolyte membrane/Cu interface
Atsuki Tsuji and Junji Murata

OS16-02 Development of laser assisted electrodeposition system without a solution cell
Yuki Tamura, Kenta Nakazawa and Futoshi Iwata