OS05 Advanced cutting technologies OS05-01 Discrete analysis of the ultrasonic vibration superimposed turning process by orthogonal cutting experiments Liborius Hendrik, Werner Jonas Maximilian, Nestler Andreas, Drossel Welf-Guntram and Schubert Andreas Chemnitz University of Technology, Professorship Micromanufacturing Technology OS05-02 Research on measuring point selection for strain-based on-machine estimation of workholding states Yu Yan, Koji Teramoto, Naruki Shoji and Hiroki OS05-03 Physical model of a hybrid tool consisting of SAG and face milling Yuichi Kurane, Ashwani Pratap, Burak Sencer and Anthony Beaucamp Keio University OS05-04 Experimental Elucidation of CuttingedgeTemperature Behavior in Terms of Ultrasonic Vibration-assisted Drilling Naofumi Tsuji, Kota Takashima, Hirofumi Kawamura, Keisuke Hara, Ryutaro Tanaka, Akira Sakurada, Kazuto Miyawaki and Hiromi Isobe Nagaoka University of Technology / National Institute of Technology, Akita College OS05-05 A Comparative Analysis of the Cutting Separation Criteria in Finite Element Simulations of Orthogonal Metal Cutting Yaoyu Wang, Liangchi Zhang, Zhen Li and Jipeng Cui Southern University of Science and Technology OS05-06 Transition of cutting forces during decelerati on of feed in interrupted cutting ??Novel ev aluation method for frictional characteristics between cutting tool and workpiece material Isaí Espinoza-Torres, Tanaka Ryutaro, Israel Martinez-Ramirez, Katsuhiko Sekiya and Keiji Yamada Hiroshima University OS05-07 Research on effect of ultra-high pressure co olant supplied from flank face in end milling of aerospace alloys supported by CFD simul ations Jingtian Mao, Kensuke Tsuchiya, Chikara Morigo and

Shinji Yukinari Institute of Industrial Science, the University of Tokyo OS05-09 Microtexture Processing on Three-

Dimensional Curved Surfaces Using Ultrasonic Milling Keisuke hara, Atsuhiro Yoshida, Naofumi Tsuji, Kota Takashima, Hirofumi Kawamura and Hiromi Isobe National Institute of Technology, Ichinoseki College

**OS05-10** Influence of cutting speed on wear pattern of diamond-coated carbide end mills in high-speed milling of WC-Co cemented carbide

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**OS05-11** The Machinability of Diamond-Coated Ball-End Tools in Milling of Free-Cutting Cemented Carbide Kota Toyooka, tetsuo Samukawa, Masafumi Nagata, Kazuhiro Tezuka and Haruiko Suwa

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**OS05-12** 3D microstructure imaging of dual-phase steels with different carbon contents and thermal histories using a 3D internal structure microscope Yuuki Aida, Norio Yamashita, Shinya Morita, Takayuki Shiraiwa, Manabu Enoki, Naoya Kiyokane, Kazuhiko Yamazaki, Shinjiro Kaneko and Hideo Yokota Tokyo Denki University

**OS05-13** An Experimental Study on the Machining Performance of Cubic Boron Nitride Tools in Ultra-Precision Machining of Ti-6AI-4V with Magnetic Field Assistance

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