

Special Issue

Dynamic Stabilization Technologies in Next-Generation Machining Systems

Review

■ Implementation of Chatter Suppression Functions in Machine Tools

Norikazu SUZUKI 403

Lecture

■ Dynamic Analysis of Machine Tools and Its Applications

Daisuke KONO 408

■ Dynamic Simulation Technology for Linear Motion Systems and Its Application to Equipment Development

Shodai AOYAMA and Ryuji FURUSAWA 412

■ Static, Dynamic, and Thermal Stiffness Design of Multimaterial Machine Tool Bed by Simultaneous Material and Structural Optimization

Taiji YAMADA, Shun TANAKA and Naohiko SUGITA 416

■ Cutting Stability Improvement Technology Using Variable-Pitch and Variable-Helix Cutters

—Chatter Suppression from the Perspective of Cutter Geometry— Masahiko SATO 421

■ Machining Vibration Control Using Tuned Mass Dampers (TMD)

Yukio NAIKI and Ken SHIRATORI 426

■ Introduction to “Machining Navi” and Chatter Suppression Technology

Shunsuke FUJIMAKI 431

■ My Experience in Precision Engineering

Yasuhiro TANI 443

■ Gravure & Interview

Tokkyokiki Corporation 399

Hiroya SAKAMOTO/Yasuyuki NOGUCHI/Takahiro MIURA

Interview: Shogo NAKASHIMA

■ Student Forum

All-Paulownia Chest ~Traditional Craftsmanship that Connects Memories 436

■ Introduction of Laboratories

Interface Function Design Lab., Department of Mechanical Engineering, Faculty of Science and Engineering, Otomon Gakuin University 441

■ Visit to Corporate Members

Fuji Die Co., Ltd. 448

- Information 473
- JSPE Affiliate News 445
- JSPE Membership Guidance 450
- From the Lecture Committee 告 6-1
- Editor's Note 告 6-9

Paper

- Development of an Energy-Efficient Air-Cooling Structure for Machine Tools Utilizing Factory Environmental Characteristics ————— 451
Naohiko SUZUKI and Shouta SHINMOTO

- High-Precision Control of Machine Tool Rotary Axis Using Feedforward Compensator for Nonlinear Friction and Model Error Compensator ————— 459
Fumiya SATO, Keita FUKUSHIMA and Kenta SEKI

- High-Speed End Milling of Cemented Carbides Using Diamond-Coated Tools—Effect of WC Grain Size and Co Content of Workpiece Material on Tool Wear Characteristics— ————— 465
Kazuki MUROOKA, Kohei KISHIMOTO, Tomohiro KOYANO, Akira HOSOKAWA and Tatsuaki FURUMOTO

※The journal papers listed above are published on J-STAGE (Japan Science and Technology Information Aggregator, Electronic).
<https://www.jstage.jst.go.jp/browse/jjspe/-char/en/>