

Special Issue Eco-Service Innovation

Review

- Eco-Service Innovation toward Sustainable Society Yasushi UMEDA257

Lecture

- Requirements and Cases of Remanufacturing Businesses Mitsutaka MATSUMOTO261
- Trend of Refurbished PC Business Mitsuhiro UEDA264
- Low Carbon Society Design by Using Information and Communication Technology
Takeshi ORIGUCHI268
- Energy Saving Service for Data Centers Tomoyuki HATA and Shinya NAKAMOTO272
- Behavior Measurement in Maintenance Service
Takeshi KURATA, Masakatsu KOUROGI, Tomoya ISHIKAWA and Anjin PARK276

- My Experience in Precision Engineering
Takeo NAKAGAWA289

- Gravure & Interview
Repro Electronics Corporation253
Kazumasa TANAKA
Interview : Shinsuke KONDO/Mitsutaka MATSUMOTO

- Introduction to Precision Engineering
Chatter Vibration in Cutting, Part 1280
Norikazu SUZUKI

- Introduction of Laboratories
YAMAWA MFG. CO., LTD. RESEARCH&DEVELOPMENT285
Surface Modification Laboratory, Department of Mechanical Engineering, Tokai University287

- JSPE Affiliate News 290
- Corporate Members 367
- From the Lecture Committee 告 3-1
- Editor's Note 告 3-39

Paper

- **Effect of Lead Inclusion on Chip Formation of Carbon Steels for Machine Structural Uses** ————— 294
Koji WATARI, Junsuke FUJIWARA and Jun IWAMI
- **Lapping Simulation Based on the Gap Theory (1st Report)** ————— 299
—Contact Condition between Workpiece and Tool and Relative Elastic Coefficient—
Atsunobu UNE, Kenji GOTO, Kenichiro YOSHITOMI and Masaaki MOCHIDA
- **Development of 6-dof Parallel Linked Stage for Lithography Tool** ————— 304
—Proof of Function—
Keiichi TANAKA
- **Robust Adaptive Contouring Control for Machine Tool Feed Drive Systems** ————— 312
Naoki UCHIYAMA and Kazuo YAMAZAKI
- **Development of a Process Planning System for 5-axis Controlled Machine Tool (2nd Report)** ————— 317
—A Determination Method of Effective Tool Posture in 3+2-axis Control Rough Milling—
Keiichi NAKAMOTO, Mitsuru TSUNODA and Keiichi SHIRASE
- **Development of Polisher for Polishing of Aluminum Type of Magnetic Disk Substrate** ————— 322
—Influence of Buffing Process in Polisher Manufacturing on Polishing Characteristics—
Heiji YASUI, Masataka TAKAGI and Yusuke TANAKA
- **Study of Laser Treatment of Abrasive Retention Force for a Thermoplastic Bonded Diamond Wheel by Thermal Processing and Ablation Effect** ————— 327
—Direct Irradiation by Multi Mode Optical Fiber for Pulse Laser—
Hiroshi MATSUURA, Yasuhiro KUNIEDA, Nobuhito YOSHIHARA, Makoto TANABE, Jiwang YAN and Tsunemoto KURIYAGAWA
- **Identification of Motion Error Sources on Five-axis Machine Tools by Ball-bar Measurements (1st Report)** ————— 333
—Classification of Motion Error Components and Development of the Modified Ball Bar Device (DBB5) —
Soichi IBARAKI, Yoshiaki KAKINO, Takayuki AKAI, Naoshi TAKAYAMA, Iwao YAMAJI and Keiji OGAWA
- **Development of nanometer level accurate computer-controlled figuring with high spatial resolution and its application to hard X-ray focusing mirror** ————— 338
Hidekazu MIMURA, Hirokatsu YUMOTO, Satoshi MATSUYAMA, Yasuhisa SANO and Kazuto YAMAUCHI
- **Steer-by-wire system integrated with active braking and driving-torque distribution** ————— 343
Ryouhei HAYAMA, Hiroshi YOSHIMOTO, Sadahiro KAWAHARA, Shirou NAKANO and Hiromitsu KUMAMOTO
- **A Study on Surface Material Measures for Areal Surface Texture Measuring Instruments** ————— 349
—1st Report : Design of the Roughness Measurement Standard for Areal Profiling—
Kentaro NEMOTO, Kazuhisa YANAGI, Masato AKETAGAWA, Michimasa UCHIDATE and Ichiro YOSHIDA
- **Intermittent-Updating-Type Market Maker for Prediction Market System Using VIPS for Collective-Knowledge-Based Demand Forecasting** ————— 354
Hajime MIZUYAMA
- **Implementation of a 5-Axis Milling Simulation System Using Triple Dixel Models** ————— 361
Masatomo INUI and Nobuyuki UMEZU