

Cover Story

This issue introduces Mitsubishi Electric's state-of-the-art industrial processing machines. The photos shown on the front cover are:

- Upper left: The ultra-precision wire-cut electric discharge machine "PA05S"
- Upper right: "MS Coating" applicable to aircraft engine parts
- Center: New model industrial robots, the "RV-SQ/SD Series"
- Lower left: The two-dimensional high-production laser sheet metal processing system "ML3015NX-60CF-R"
- Lower right: The new model PCB laser drilling system "ML605GTW II-5150U"

• **Editorial-Chief**

Takeshi Sugiyama

• **Editorial Advisors**

*Chisato Kobayashi
Shinji Iwasaki
Makoto Egashira
Koji Yasui
Hiroaki Kawachi
Masayuki Masuda
Satoshi Itoda
Kiyoji Kawai
Kazuhisa Hemmi
Taizo Kittaka
Hidenori Takita
Itsuo Seki
Kazufumi Tanegashima
Kazumasa Mitsunaga*

• **Vol. 123 Feature Articles Editor**

Masahiro Suzuki

• **Editorial Inquiries**

*Makoto Egashira
Corporate Total Productivity Management
& Environmental Programs
Fax +81-3-3218-2465*

• **Product Inquiries**

*Hiroyuki Honda
Marketing Planning Section
Industrial Automation Machinery Marketing
Division
Fax +81-3-3218-6822*

Mitsubishi Electric Advance is published on line quarterly (in March, June, September, and December) by Mitsubishi Electric Corporation.
Copyright © 2008 by Mitsubishi Electric Corporation; all rights reserved.
Printed in Japan.

CONTENTS

Technical Reports

Overview1
by *Nobuo Shogaki*

Features of New Industrial Robot "SD and SQ" Series.....2
by *Takafumi Ishikawa*

Motion Control Functions for Industrial Robots5
by *Kiyoshi Maekawa*

Development of MSCoating for Aircraft Engine Parts.....8
by *Masahiro Okane and Akihiro Goto*

High Quality Hard Metal Machining System, "ASC"10
by *Yoji Nakajima and Shuichiro Ishihara*

CO₂ Laser Processing System "ML3015NX-60CF-R"13
by *Kazuo Sugihara and Takashi Inoue*

Laser Drilling System ML605GTW II-5150U.....16
by *Mitsuhiro Kaneda and Toshiyuki Hokodate*