New Jersey Companies Receive Recognition

Six New Jersey metal finishing companies recently received recognition for environmental accomplishments as participants in the National Metal Finishing Strategic Goals Program (SGP), a partnership between federal, state and local governments and industry.

Performance ladders are created by local and state SGP programs to structure benefits for incremental improvements by the participating metal finishers. Within this context, local implementation groups have tremendous flexibility in deciding what benefits are appropriate. Consideration is given to environmental conditions, objectives and regulatory framework.

The New Jersey program has three performance levels: Bronze awards are given for completing one-third of the goals; Silver awards are given for completing two-thirds of the goals, and Gold awards signify 100-percent achievement of the goals.

The companies being placed on the Silver level of the New Jersey SGP performance ladder are:

- Automatic Electroplating, Newark
- Mara Plating and Polishing, Newark
- New Brunswick Plating, New Brunswick
- Polaris Plating, Paterson
- Sample Marshall Laboratories, Lyndhurst
- Stirrup Plating Products, Newark

The contributions were recognized by the U.S. Environmental Protection Agency (EPA) and the New Jersey Department of Environmental Protection (DEP) in ceremonies held at DEP headquarters in Trenton, NJ.

The state's Strategic Goals Program for metal finishers and electroplaters is the third-largest in the nation, with 45 companies and five wastewater treatment plants signed on.

For more information on the program, contact the National SGP Outreach team (703/354-2172; www.strategicgoals.org).

Test Your Plating I.Q. #365

By Dr. James H. Lindsay, AESF Fellow

Thickness Tests

1. Which of the following thickness tests are non-destructive?
   a) Optical microscope in cross-section
   b) Eddy current
   c) X-ray fluorescence
   d) Chemical drop test
   e) Beta backscatter
   f) Kocour
   g) Magnegage

2. Which of the following thickness tests are destructive?
   a) Optical microscope in cross-section.
   b) Eddy current
   c) X-ray fluorescence
   d) Chemical drop test
   e) Beta backscatter
   f) Coulometric
   g) Magnetic

3. One magnetic method measures the _____ required to detach a small magnet from the coated surface of the workpiece.

4. Magnetic-type instruments measure magnetic reluctance, while eddy current instruments measure _____ _____. Both require calibration against _____ _____.

5. Which method does NOT use the principle of mass-per-unit-area when measuring thickness?
   a) Weight gain
   b) Coulometric
   c) Eddy current
   d) X-ray fluorescence

Answers are on page 71

SME Awards Highest Honor To Emerson's Knight

Charles F. Knight, chairman of Emerson, has been selected for Honorary Membership by the Society of Manufacturing Engineers (SME). This prestigious designation, the organization's highest tribute, was conferred at SME's 2001 annual awards banquet in early June.

Knight was honored for his strategic leadership of Emerson, formerly known as Emerson Electric Co. In Knight's 27 years as CEO, Emerson evolved from a primarily domestic producer into a leading global manufacturer widely recognized for developing innovative technology-driven products in the fields of industrial automation; process control; electronics & communications; appliance & tools; and heating, ventilating & air conditioning. The company is now the

leading provider of reliable power and climate control equipment used by telecom providers and Internet-based companies.

AEC Releases Buyers' Guide

The Aluminum Extruders Council (AEC) has published the *2001 Shapemakers Buyers' Guide*. The publication provides helpful information for finding aluminum extruders that meet the needs of product designers, engineers and specifiers.

An essential aluminum industry resource, the Guide is available at no cost. It is arranged in three formats: alphabetical list, geographical list, and capabilities chart. The information includes the location of the company's headquarters, plant locations, contact names, phone numbers, e-mail addresses, press sizes, forms produced, value-added services, and more.

The *2001 Shapemakers Buyers' Guide* is also available by logging on to www.aec.org. From there, visitors can utilize the site's search engine to locate aluminum extruders by location, production capability, and any selected criteria the visitor chooses.

For more information, contact AEC (phone: 847/526-2010; FAX: 847/526-3993; e-mail: mail@aec.org).

Owens Community College Teams With Companies To Offer Finishing Workshops

Owens Community College, Toledo, OH, is partnering with private companies to offer two programs on organic finishing technology.

DeVilbiss and Binks will assist the college with presenting a Spray Finishing Technology Workshop September 19–21, 2001, in Toledo. Classes will meet from 8:30 a.m. to 4 p.m. daily for both classroom and hands-on sessions. Two continuing education units (CEUs) are awarded for the course.

Attendees should be involved with industrial, contractor, or maintenance spray finishing applications, or spray equipment sales and distribution. Workshop topics will include:

- Equipment types and selection
- Equipment set-up, operation and maintenance
- Surface preparation and defect analysis
- Material selection
- Safety and regulatory concerns

Owens is partnering with ITW Ransburg Electrostatic Systems to present a training program titled "Fundamentals of Electrostatic Painting," September 25–26, 2001 in Toledo. The two-day workshop will meet 9 a.m. to 4 p.m. daily. Completion will earn 1.2 CEUs. Attendees should be involved with, or interested in, electrostatic application of finishing materials. Topics will include:

- Principles of electrostatic painting
- Advantages and implications of electrostatic coating applications
- Equipment selection, operation and maintenance
- Understanding coating materials, substrates, and transfer efficiency
- Safety and grounding concerns

To register for the workshops, contact Owens Community College, Center for Development and Training: 800/466-9367, ext. 7357. For information contact Dr. Richard A. Kruppa, workshop coordinator (e-mail: sprayworkshop@netscape.net; phone: 419/354-8201).

Company News

❑ **Technic, Inc.**, Cranston, RI, has been appointed to be the North American representative to the electronics and printed circuit board industries by **Dr. Ing. Max Schlötter GmbH & Co. KG** of Germany. The agreement calls for cooperation of the companies in the development of new process and equipment technologies for products designed to meet next-generation requirements for the semiconductor, connector and printed circuit industries.

Technic has been an international supplier of plating chemistry and equipment for more than 50 years. The company offers proprietary chemistries and specialized custom plating.

❑ **SensIR Technologies**, Danbury, CT, has named **PerkinElmer Instruments** as exclusive distributor of its proprietary portable Fourier Transform Infrared (FT-IR) spectrometer. The agreement is a continuation of the strategic partnership formed by the two companies in April 2000 to expand worldwide distribution of SensIR products.

PerkinElmer Instruments provides application-specific analytical solutions for the pharmaceutical, food and beverage, environmental, chemical and semiconductor industries.

SensIR Technologies manufactures and supports a complete range of FI-IR sampling technologies for commercial spectrometers. It developed and supplied the first portable FT-IR analysis spectrometer for remote location applications.

❑ **Enthone** was one of 24 companies to receive **Intel Corporation**'s 2000 Preferred Quality Supplier (PQS) award for outstanding performance in providing products and services deemed essential to Intel's success.

"Enthone, supplying C4 plating chemistries, has achieved this award by demonstrating strong commitment to Intel's requirements with proactive and solid execution in the areas of quality, cost reduction, and engineering support," said Jim Harrison, director of **Fab Materials Operations** at Intel.

PQS awards are part of Intel's Supplier Continuous Quality Improvement (SCQI) process to encourage suppliers to strive for excellence. To qualify, suppliers must score highly on a quality systems assessment and a supplier report card, as well as meet challenging performance expectations against an improvement plan.

Intel is the world's largest chip maker and a leading manufacturer of computer, networking and communications products.

A **Cookson Electronics** company, Enthone is part of the **Polyclad Technologies** business sector that also includes **Polyclad Laminates**.

❑ **Lambda Physik AG** has entered a joint venture with **Jenoptik Laser Optik Systeme GmbH** to develop and produce radiation sources in the extreme ultraviolet range (EUV). The two German companies each hold a 50-percent stake in the enterprise, named **XTREME Technologies GmbH**.

XTREME will develop electronically excited discharge plasmas and laser-produced plasma sources. Lambda Physik AG is contributing its expertise in gas discharge and pulsed circuit technologies and in exciter and solid-state laser technologies. Jenoptik Laser Optik Systeme is contributing its expertise in solid-state laser development and in optics.

❑ **Southern Aluminum Finishing Co**. (SAF), Atlanta, GA, recently

added a 175-ton press break and a 20-in. by 196-in. shear that enables it to fabricate shapes up to 194 in. (16+ ft) long and .25 in. thick.

SAF stocks anodized aluminum sheets in popular architectural sizes and colors. The company specializes in custom finishing of extrusions, offering both powder and spray coatings, PVDF paint and more.

SAF has been a provider of aluminum anodizing, coating and fabricating services for almost 60 years. The company operates facilities in Atlanta, Nashville, TN, and Sanford, NC.

❑ **Bales Mold Service, Inc**., Downers Grove, IL, has opened a 7,000 ft^2 facility in Harlingen, TX. The new plant is currently offering metal polishing and hard chromium plating services.

Bales specializes in polishing and also offers a variety of plating products for injection molding applications, including a proprietary nickel-cobalt coating and other alternatives for conventional coatings.

❑ **Houghton International**, Valley Forge, PA, a large supplier of heat-treating chemicals, is pooling resources with the **Center for Heat Treating Excellence (CHTE)** to better understand, control and optimize the heat-treating process. Houghton's role in the initiative is to conduct research and develop the chemistry needed to provide various quenchants for commercial applications. The partnership allows the experts from the two fields to combine talents to raise the level of understanding of the quenching process.

CHTE was founded in 1999 with the overall "stretch" goals of achieving zero emissions, reducing energy consumption by 80 percent, and eliminating distortions in heat-treated materials.

❑ **Ciba Specialty Chemicals Corporation,** Tarrytown, NY, has appointed **Tri-Iso, Inc**., Claremont, CA, to represent its polymer specialties line of acrylic resins and additives for coatings applications in the western U.S. The product line will include a wide range of proprietary products offered by Ciba.

Tri-Iso will represent Ciba in Washington, Oregon, Idaho, California, Nevada, Utah and Arizona.

Answers to I.Q. Quiz #365

1. b, c, e, g

2. a, d, f

3. force

4. electrical impedance, thickness standards

5. c) eddy current—the others measure the weight gain from plating (a), count the coulombs required to strip a given weight off a selected area (b), or count atoms in a selected area (d).