Anodizers Produce New Technical Bulletin

The Aluminum Anodizers Council (ACC) has produced a new technical bulletin, "The Effects of Anodizing on Electrical Conductivity." The bulletin explains the benefits of anodized aluminum as a non-conductive surface.

Previously released to ACC members, the document is one in a series of bulletins published by the organization. It includes reference tables for "Specific Resistance of Various Insulation Materials," "Specific Breakdown Voltage," and "Effect of Composition of Aluminum or Alloy on Breakdown Voltage."

For information, contact ACC at (847) 526-2010 or visit www.anodizing.org.

George Pilcher to Give FSCT Mattiello Lecture

The Federation of Societies for Coatings Technology (FSCT) has selected George R. Pilcher of Akzo Nobel Coatings, Inc., to deliver the Joseph J. Mattiello Memorial Lecture during its 82nd annual meeting, November 27–29, Chicago, IL.

The meeting is being held in conjunction with the International Coatings Exposition and the International Coatings Technology Conference.

The lecturer is chosen from among individuals who have made outstanding contributions to the science and technology of coatings. Those chosen are invited to deliver a paper on a phase of chemistry or other physical science, engineering, human relationships or other sciences fundamental to paint and coatings, varnish, lacquer, or otherwise related to protective or decorative coatings.

Pilcher's expertise in the science and technology of chemical coatings has led to the publication of more than 20 invited papers, which have appeared in a variety of technical publications in the industry. He has been in wide demand as a lecturer and industry spokesman for many years.

Peters Named SME President

Richard C. Peters, CMfgE, P.E., Bucyrus, OH, has been named president of the Society of Manufacturing Engineers (SME for 2004. He is chief manufacturing engineer at The Timken Co.

A member of SME since 1979, Peters previously served on the organization's board of directors, and as president-elect in 2003. He says his goal as president is to "strengthen the core engagement opportunities and foster more member involvement.

Others elected to serve with Perters were: Eugene M. Nelson, president-elect; William J. Geary, vice president; and Edward H. Abbott, secretary/treasurer.

Test Your Plating I.Q. #393

By Dr. James H. Lindsay, AESF Fellow

Current and Metal Distribution

1. What is primary current distribution?

2. What two classes of factors distort the primary current distribution?

3. The distortion results in a _____ current distribution?

4. What is polarization?

5. What is the difference between "covering power" and "throwing power"?

Answers on page 30

Company News

❑ GE Aircraft Engines (GEAE), Evendale, OH, has completed its acquisition of the Agfa-Gevaert Non-Desructive Testing (Afta NDT) business unit. The unit will be combined with GEAE's Non-Destructive Testing business and will be renamed GA Inspection Technologies.

The new firm will offer radiographic, ultrasonic, eddy current and other inspection solutions that test structure and tolerance of materials without damaging them. It will serve aerospace, energy, chemical/petrochemical, automotive and other related industries.

Jeff Nagel has been named president of GE Inspection Technologies. He most recently served as general manager of business development at GEAE, and prior to that he served as president of GE Home Electric Products. The purchase agreement also includes a supply agreement for GE Inspection Technologies to become the exclusive seller of Agfa NDT X-ray film. Agfa will retain its NDT X-ray film production.

❑ Shipley Company, LLC, part of Rohm and Haas Electronic Materials, has announced an agreement with Grace Electron Corp. to broaden its circuit board product offerings to include substrate materials. Shipley will become the exclusive distributor of Grace Electron laminate and prepreg materials in North America.

Shipley's distribution network will support customers using the Grace Electron substrate material product line. The products will be offered under Shipley's existing proprietary product portfolio.

❑ Shipley Company, LLC, recently announced that its facilities in Freeport, NY, Lucern, Switzerland and Sasakami, Japan have achieved certification for ISO-9001:200 quality management system. Other sites already certified operate in China, England, Hong Kong, Singapore and Taiwan.

❑ Wall Colmonoy's Oklahoma City plant has been recognized as a Quality "1" Supplier for aircraft exhaust systems by Cessna Aircraft Company's Supplier Tracking and Reporting System (STARS

2000). Wall Colmonoy Oklahoma City is the official supplier of aircraft exhaust systems for the Cessna single engine piston aircraft division in Independence, KS.

❑ A Brite Company, Dallas, TX, has moved into a new building located at 3217 Wood Drive, Garland, TX, a suburb of Dallas. The 50,000 ft2 facility includes a new technical service laboratory, research and development laboratory and state-of-the-art manufacturing line. The company makes and markets proprietary cleaners, brighteners, phosphates and post treatment products.

A Brite Company has moved to a new location in Garland, TX, a suburb of Dallas.

❑ Tanaka Kikinzoku Kogyo K.K. (TKK) and Enthone, Inc., a Cookson Electronics company, have reached an agreement for strengthening their precious metal plating process business throughout Asia. As part of the agreement Enthone's joint venture, Electroplating Engineers of Japan, Ltd., (EEJA) will sell, distribute and market its precious metal surface treatment chemicals throughout Asia.

EEJA's precious metal surface treatment chemicals have been distributed by TKK in Japan, and by Enthone in other Asian countries. However, because many EEJA customers have been shifting production lines to other Asian countries, EEJA decided to manufacture and increase sales support throughout the region.

In conjunction with the new structure, TKK and Enthone will form a stronger relationship to manufacture and market its products in Asia. TKK will increase the number of sales engineers specially trained in surface treatment processes at its existing sales offices in Seoul, Taipei, Shanghai, Hong Kong, Manila, Singapore and Penang. It will also strengthen the process of distributing precious metals' salts, as well as recycling precious metals waste through sales activities.

❑ Metal Improvement Company (MIC), Bensalem, PA, has added fluoropolymer powder and liquid coating capabilities. The company now offers a wide range of fluoropolymer coatings, and has the capability to apply epoxy, polyester, phenolic, nylon, solid film lubricant and architectural powder coatings.

In addition, the facility offers grit blasting, fluorescent penetrant inspection, chromic/phosphoric acid anodizing, a proprietary aluminum treatment, glass beading and shot peening.

The shop, which has more than 2,000 ft^2 of processing space, serves the aerospace and other industries. It's a wholly-owned subsidiary of Curtiss-Wright Corp.

❑ Rohm and Haas Microelectronic Technologies, Marlborough, MA, recently achieved Manufacturing Resource Planning (MRP II) Class A certification. The achievement demonstrates sustained commitment to the highest standards for operational excellence in the industry.

A spokesman said the goal of MRP II Class A is improved customer service as measured by on-time delivery to the customer.

The certification covers the strategic, tactical and operational areas of the business.

❑ Precision Process Equipment, Inc., Niagara Falls, NY, and Process Systems International (PSI), Phoenix, AZ, have merged. The merger brings the patented products and designs of Precision Process Equipment, PSI, Robbins & Craig, Carolinch, American Plating Systems and Stewart Technologies into one company. The company will serve the electroplating, wet processing, ceramics, semiconductor, MEMS and allied industries.

Manufacturing capabilities include reel-to-reel selective plating lines, wide web plating systems, wire plating lines, automated barrel and rack hoist lines, wafer plating machines, wet benches for semiconductor and MEMS applications, etching machines and continuous electropolishing systems. The company offers a variety of patented products and systems, as well as services, such as contract CNC machining, custom exotic plastics and metals fabrication, design engineering, R&D support, field retrofits and contract maintenance services.

Doug Stewart, president of PSI, is now vice president, finishing systems for the company. The PSI manufacturing facility in Phoenix will continue to be utilized by the company, which will be headquartered in Niagara Falls.

Answers to I.Q. Quiz #393

1. Primary current distribution is the current distribution over a workpiece to be plated in the absence of polarization or other disturbing factors.

2. (a) Those related to the plating bath and conditions of operation.
   (b) Those aspects of the shape and design of the workpiece (*i.e.*, part geometry).

3. *Secondary* current distribution.

4. Any effect of the passage of a plating current that results in increased electrical resistance.

5. Covering power is the ability to deposit metal at very low current densities, such as deep recesses or holes. Throwing power is the ability of the metal distribution to match the primary current distribution. Low throwing power implies that the metal deposited in a recess is lower than what the primary current distribution says it should be. Low covering power implies that you can't deposit any metal in the recess *at all*.