## Finishing Facts

## ASTM Launches On-line Standards Development Aid

ASTM International, West Conshohocken, PA, has announced the launch of a new Internet-based system designed to initiate, develop and track draft standards and revisions before and during their balloting stage.

The new Work Item Registration system, which is accessible from the ASTM Web site, adds increased openness and transparency to the organization's consensus standards development process. Any interested individual from anywhere in the world who wants to know whether ASTM is developing or revising a specific standard can access the information using the system. Users can perform key word searches about new standards and revisions, sign up for a free e-mail advisory service that provides notification of new work items in an area of interest, and view a committee's jurisdiction.

The new system also provides improved access and involvement for ASTM members around the world at every stage of the standards development process. With easy access to work items in progress, ASTM members anywhere have added impact on standards development. The system adds a new level of productivity for members, enabling them to register work items and develop streamlined ballot items for standards more conveniently.

Visit www.astm.org to view the Work Item Registration system.

# **SME Names Nine To College of Fellows**

The Society of Manufacturing Engineers (SME) has announced the election of nine industry leaders to the SME College of Fellows. The nine will officially be recognized in ceremonies on November 16 in Dearborn, MI, during the fall meeting of the SME board of directors. Elected were:

 David Arnold, vice president and chief technical officer, Kennametal, Inc., Latrobe, PA.

## Test Your Plating I.Q. #388

By Dr. James H. Lindsay, AESF Fellow

#### **Metal Cleaning**

- 1. Name as many kinds of soils encountered in metal finishing as you can.
- 2. To which of the following substrates is anodic electrocleaning applicable? Steel

Nickel and its alloys

Brass

Zinc die-castings

Stainless steel

3. To which of the following substrates is cathodic electrocleaning applicable?

Steel

Nickel and its alloys

Brass

Zinc die-castings

Stainless steel

- 4. Besides anodic and cathodic electrocleaning, what other electrocleaning method is used and to what is it applicable?
- 5. Electrocleaning is usually the final step in a sequence of cleaning processes? What are these?

#### Answers are on page 54

- Dennis S. Bray, PhD, executive vice president, Cincinnati, Inc., Cincinnati, OH.
- Thomas Charlton, Jr., consultant, Charlton Associates, North Kingstown, RI.
- Fukuo Hashimoto, PhD, senior scientist and director, Advanced Process
   Technology, the Timken Co., Canton, OH
- Bruce M. Kramer, PhD, director of Engineering Education and Centers, National Science Foundation, Arlington, VA
- Don A. Lucca, PhD, CMfgE, a Tom J. Cunningham professor at Oklahoma State University, Stillwater, OK.
- Brij B. Seth, PhD, PE (retired) corporate technical specialist, Ford Motor

- Company, Canton, MI.
- Rajiv Shivpuri, PhD, former professor, Industrial & Systems Engineering, Ohio State University, Columbus, OH.
- Klaus Weinmann, PhD, professor, Michigan Technological University, Houghton, MI.

The SME College of Fellows was created to honor members who have made outstanding contributions to the field of manufacturing. A Fellow is a member recognized by the manufacturing community as a contributor to the social, technological and educational aspects of the profession. The honor can only be earned through years of dedication and service to manufacturing engineering.

### **Company News**



Quality
Metal Finishing
Company (QMF),
Byron, IL, has
published a new
brochure describing how companies
may conveniently
outsource any or
all facets of cast-

ing, finishing, and plating production.

The brochure features QMF's completely integrated manufacturing operations, including extensive casting services that are supported with secondary operations, such as drilling and tapping. Finishing operations are shown with examples of hand and automatic buffing to provide consistently smooth finishes. Also presented are plating services for bright chromium, satin chromium, brushed nickel, PVD, and other services for plating zinc, brass or steel.

To request a copy of the new brochure, visit the company's Web site at www.qmfco.com.

☐ In a move to broaden its product offerings in high-end, high performance printed wiring board (PWB) applications, Cookson Electronics, Inc., has announced it intends to enter into a license agreement with GE Electromaterials, a business component of GE Plastics. In conjunction with the agreement, Cookson's PWB laminates business, Polyclad Laminates, Inc., will acquire certain rights to manufacture, dis-

#### In Memoriam

William R. "Bill" Kelly III, 67, a member of the AESF Blue Ridge Branch, died on July 17, 2003. He was a metallurgical chemist with a broad experience in the electroplating industry. He was more recently employed as a technical service consultant for Surtronics, Inc., Raleigh, NC. Kelly had been a member of the Blue Ridge Branch for many years.

William Henry "Bill" Head, Jr., 74, died October 13, 2002, in Charlotte, NC. Born in Tampa, FL, Head grew up in Arden, NC. He was a veteran of the U.S. Navy where he served on the USS Lexington during World War II.

Head worked as an electroplater for many years, and also worked as a chemical salesman for the surface finishing industry. He was last employed by Luster-On.

Head was a member of AESF for more than 40 years, and was a past president of the **Blue Ridge Branch**. He also had a compassion for antique cars and was a member of the American Antique Car Association and the Hornets Nest Region Car Club.

**David Michael Weaver**, 35, president of Toccoa Metal Finishing, Toccoa, GA, was killed in an automobile accident on August 15, 2003. He was a member of the **AESF Southeastern Branch**.

Weaver was a student at Clemson University when his parents, Dan and Joyce Weaver, founded Toccoa Metal Finishing. David, who played football at Clemson, joined the family firm full time in 1991. He was appointed president in 2000, and was instrumental in winning the 2001 Georgia Manufacturer of the Year award in the small business category. At the time of his death, the company was only one week from its final ISO audit. David's father, who was retired, has returned to run the company.

tribute and sell certain proprietary copper clad laminate and prepreg materials. The laminates and prepregs are patented products composed of epoxy and polyphenylene oxide resins. They offer the improved thermal and electrical properties needed for sophisticated circuitry. They are used in a wide variety of applications, including those in the telecommunications, computer and packaging industries. □ BASF AG, a global chemical manufacturer, recently opened a new plant in Ludwigshafen, Germany, capable of making 10,000 metric tons per year of methanesulfonic acid (MSA). The plant will produce proprietary MSA products used in the electroplating, electronic component and chemical industries.

**BASF Corporation**, a U.S. subsidiary of BASF AG, is located in Mount Olive, NJ.

☐ A consortium of firms comprised of The Blackstone Group, Apollo Management, L.P., and Goldman Sachs Capital Partners, has agreed to acquire **Onedo Nalco** from Suez, S.A., in a transaction valued at \$4.2 billion. Nalco is a global company that provides water treatment and process chemicals and services to companies in the industrial (including surface finishing), institutional, pulp and paper, and energy sectors. With more than 10,000 employees worldwide, a large number of Nalco workers are members of AESF.

□ ACM Company, Forest Hill, MD, has appointed **Enequist Chemical Company**, **Inc.**, Brooklyn, NY, to market and sell it's line of resin regeneration and wastewater treatment services to metal finishing customers

ACM Company is a fully permitted ion exchange resin regeneration plant located near Baltimore. The company is a subsidiary of ResinTech, Inc., a manufacturer of ion exchange resins and specialty media.



The people of Lincoln Plating, Lincoln, NE, recently presented one of their largest customers, Harley-Davidson, a life-sized sculpture of an American Bald Eagle standing on a 100th anniversary emblem of Harley-Davidson. The piece was sculpted from car bumpers by Loi Vo, a 20-year veteran at Lincoln Plating, and an accomplished artist. Antique copper plating was used on the wings and body, the head is nickel-chrome finished, and gold plating was used on the feet and beak. Shown here at the presentation are (l-r): Yadi Kamelian, vice president, Lincoln Plating; Hank Orme, president, Lincoln Plating; Gary Berryman, vice president of materials management, Harley-Davidson; Loi Vo, polisher and sculptor, Lincoln Plating; Willie G. Davidson, executive vice president of styling, Harley-Davidson; Louie Nets, vice president and director of styling, Harley-Davidson; and Marc LeBaron, CEF, chairman and CEO, Lincoln Plating.

#### ☐ Dixie Industrial Finishing Company,

Inc., Tucker, GA, has achieved certification to ISO 9001:2000 quality management system. The company offers a variety of electroplating and surface finishing processes and related treatments for a wide range of industries, including aerospace, agriculture, automotive, electrical, and lawn and garden.

☐ Altair Nanotechnologies, Inc., Reno, NV, has entered into a memorandum of understanding with Titanium Metals Corporation, Denver, CO, to collaborate on a new development program for producing low-cost titanium metal. Titanium Metals Corp. is one of the world's largest suppliers of titanium and titanium alloys for the aerospace, military and manufacturing industries.

Altair, a pioneer in the nanotechnology field, has developed a patented process for producing titanium powder at much lower costs than conventional processes.

#### Answers to I.Q. Quiz #388

1. Obviously, this is an endless list, but the big actors are:

Stamping oils

Machining oils

Drawing compounds

Oxides

Scale (heat-treat, welding, etc.)

Smut Tarnish

Iron rust

Shop dirt / dust

Fingerprints

Polishing and buffing compounds

Brazing fluxes

Corrosion inhibitors

Corrosion

Metal dust

Carbonaceous soils

Just plain old dirt, sweat and grime

And the ever popular ... crud.

2. Steel

Brass

Zinc die-castings

3. Nickel and its allovs Stainless steel

- 4. Periodic reverse electrocleaning is used on irons and steels to remove welding scale, rust and smuts.
- 5. Like question (1), this list is also incomplete, but for starters:

Alkaline immersion (soak) cleaning

Ultrasonic cleaning

Mass finishing

Spray cleaning

Abrasive slurry

Shot peening

Old-fashioned elbow grease

## **AESF Bookstore Compact Disks**

## New



#### **Hull Cell CD**

Use your computer at home or at work to learn more about Hull Cell Testing, an important quality and time-saver for finishers. The CD utilizes MS PowerPoint and gives you easy-to-understand, step-by-step instructions. Other features of the CD include a quiz with 20 questions (and guidance if you answer incorrectly), articles that can be printed, and a shopping guide for equipment and supplies.

Order number 25-275 Members/non-members \$50.00

#### New



#### Measuring Surface Tension for MACT Compliance

To be in compliance with EPA's Chromium MACT, finishers must be able to acurately measure surface tension. It can be tricky, and there are numerous measurement methods. EPA allows any method that is equivalent to a stalagmometer. What method should you use? How do you know if you're measuring correctly?

These questions are answered in the new CD prepared by AESF's technical director, Frank Altmayer, MSF, AESF Fellow. Frank gives step-by-step instruction that takes out all the guesswork, in less than 60 minutes of your time. The CD even includes a quiz (with guidance if you answer incorrectly), articles that can be printed on surface measurement, and a shopping guide for equipment and supplies.

What's good about having this information on CD is that at any time, at your convenience, you can refresh your skills or teach someone else how to measure surface tension—all for one low, one time price.

Order number 25-295 Members/Non-members \$50.00

#### **Three Ways to Order!**

1. Mail to 12644 Research Parkway Orlando, FL 32826-3298



2. Call in your order 1-800/334-2052 (by credit card)



3. Go on-line at www.aesf.org (secure site)