

Materials/Products

A new series of BeAl alloys for investment cast components requiring light weight, high stiffness, strength, ductility, and thermal conductivity has been introduced by Nuclear Metals, Inc. The BeralCast alloys come in two standard types: Beral-



Nuclear Metals, Inc.

Cast-191 for electronic eat exchanger components, and BeralCast-363 for structural components. The BeralCast alloys are 20% lighter than wrought Al-6061 or cast A-356, have 5% elongation, and 38 ksi tensile strength. For further information, contact: John D. Nicholson, Nuclear Metals, Inc., 2229 Main St., Concord, MA 01742; tel: 508/369-5410; fax: 508/369-4045.

ORPAC, Inc. has introduced PYRRHOS-1600 high-temperature paint ideal for marking and identification, as well as for protecting exhaust systems, furnaces, burners, and process equipment from industrial environments to above 1600°F. The paint can be applied to all metals, ceramics, and graphite to resist attach from oxidative atmospheres, molten metals, slags, and fluxes. Painted surfaces become fully water proof after a low temperature 300°F cure. For further information, contact ORPAC, Inc., PO Box 5436, Oak Ridge, TN 37831; tel: 615/482-4635; fax: 615/482-1281.

A line of high performance fluoroelastomer caulks and sealants, formulated from DuPont's VITON® (a fluorine-containing synthetic rubber) is available from Pelmor Laboratories, Inc. PELSEAL® and PELSEAL® PG are capable of withstanding temperature extremes of -40 °F to +400°F and resisting attack from many corrosive chemicals and liquids, including oil, gasoline, hydraulic fluids, hydrocarbon solvents and sulfuric acid. These products are easily applied, are resistant to ozone, sunlight, and UV radiation, and have superior tensile strength. For further information, contact: Pelmor Laboratories, Inc., 401 Lafayette Street, Newtown, PA 18840-0309; tel: 800/772-6969 or 215/968-3334; fax: 215/968-6415.

Insulating riser inserts made from an insulating ceramic, which are designed for permanent mold and low pressure die casters, are now available from Pyrotek Inc. The inserts improve the metal feed of castings, reduce costs, and increase pro-

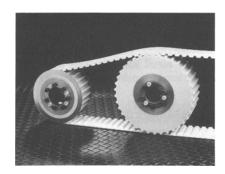


Pyrotek, Inc.

ductivity. The low shrinkage and high insulating properties of the risers also eliminate the need for prolonged preheating and offer good service life. When worn, risers can be replaced on line without stopping production. For further information, contact Anna Henry, Pyrotek, Inc., 9503 East Montgomery, Spokane, WA 99206; tel: 509/926-6212; fax: 509-927-2408.

FURON ADP's RULON Liquid, a highperformance mold release, dry lubricant and anti-stick agent is now available form the Surf-Tec division of John R. Hess & Co. The liquid is for use on plastics, resins, rubber, and many other materials, an has s a coefficient of friction ranging from 0.07 to 0.15. It can also be used for leather, plastic, and elastomer belts, gaskets, packings, gears, and bearings. As an anti-stick agent, RULON liquid can be applied to the surfaces of blenders, tanks, chutes, forms, spray booth, and other equipment. For further information, call 401/785-9300.

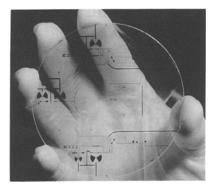
Long-wearing Power-Core timing belt pulleys are available from Intech Corporation that have high-performance wear-resistant characteristics, which eliminate metal particle contamination and reduce friction, centrifugal force and vibration. The lightweight, composite pulleys (made of a self-lubricating Lauramid material se-



Intech Corp.

curely cast around a steel hub) permit higher belt and rotational speeds and require less energy to bring machinery smoothly and quietly up to full speed or to slow down. The long-wearing belt experiences little sliding resistance on the self-lubricating pulley. For further information, contact George Bartosch, Intech Corp., 250 Herbert Ave., Closter, NJ 07624; tel: 201/767-8066.

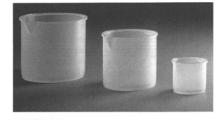
DuPont has developed a two-channel microwave receiver based on superconducting film circuitry that has a 2-µm coating of Teflon AF fluoropolymer. This coating protects the superconductor film against damage by atmospheric acids. The

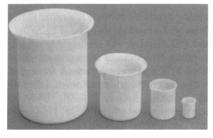


DuPont

coating is applied by standard spin coating methods. Controlled thicknesses down to 1 µm are produced by adjusting spin speed and the solution's solids content. Solvent is evaporated from the coating at 100°C (212°F), and no chemical curing is involved. The solutions are completely compatible with photoresists used in standard circuit-etching processes. For further information, call DuPont Fluoroproducts at 800/292-0181.

Norton Performance Plastics has introduced *Teflon PFA and PTFE beakers*, which can be used for microwave heating. Because Teflon PFA resin has the lowest concentration of metal ion content of all fluoropolymers, the beakers are suitable for trace metal analysis. This beaker can also be used for pilot scale semiconductor





Norton Performance Plastics

chip processing with hot aid etchants and catalytic reaction processes. The PTFE beaker is ideal for handling highly aggressive acids that attack glassware and stainless steel. For further information, call Norton Performance Plastics at 216/798-9240.

Dow Plastics has developed a solid epoxy resin in a solution that is compliant with the Hazardous Air Pollutant provisions of the 1990 Clean Air Act amendments.

D.E.R. 660-PA80 is a reaction polymer of bisphenol-a/epichlorohydrin in 80% propyl acetate solids solution. The new resin system can be used in both primer and topcoat coatings formulations for excellent corrosion protection in industrial maintenance and marine applications. The resin sets to touch in 90 min. and has a pot life of 6 h. For further information, contact the Dow Chemical Company, Customer Information Group, PO Box 1206, Midland, MI 48641-1206; tel: 800/441-4DOW.

Kawasaki Steel Corporation has developed a welding solid wire that lowers costs 40% compared to CO2 gas shielded solid wire. Initially intended for thin sheet applications, including automobile and industrial appliance production lines, it has been upgraded to handle thick and extremely thick plate, including steel-frame machining and rolling-mill stands. Called KM-50S, features include one-tenth that of conventional wire and low-fuming properties, as well as favorable wire-feed and low slag-generation characteristics. The result is an improved arc time ration (welding time) near 45 to 50%. For further information, contact Kawasaki Steel Corporation, Kokusai Bldg., 2-2-3, Uchisaiwaicho, Chiyoda-ku, Tokyo 100, Japan; tel: 03/3597-3111; fax: 03/3597-4868.

Processing/Equipment

Built to meet most coil handling needs, the V-Type Coil Car from ASC Machine Tools, Inc. comes with a complete above ground track, no pit, no rails, and easy anchoring. Options include storage racks, platen extensions for small diameter coils, rotating and nonrotating saddles, electrical interlocks, and custom controls. Bases and frames are of all-steel, welded construction. For further information, contact ASC Machine Tools, Inc., N. 900 Fancher Road, PO Box 11619, Spokane, WA 99212-1619; tel: 509/534-6600; fax: 509/536-7658.

Battelle has developed a new high-speed, hot-dipping process to apply brass coating to the steel cord used to reinforce automobile tire. The hot-dipping process reduces costs and improves productivity, while producing virtually no pollution. In the process, the wire passes vertically at high speed through a nozzle filled with molten

brass. Because the wire is moving through the molten metal at a high speed and its contact with the melt is brief, the brass coating is homogeneous, uniform, and adheres tightly to the core wire. Following the process, the wire can be drawn to a very high reduction to produce the thin strands used to reinforce tires, the process offers the potential for using new alloy compositions. For further information, contact Michel Kommann, Battelle-Geneva; tel: 41/22/827-2316; fax: 41/22/827-2316.

Version 4 of MetCAPP, production planning software, has been introduced by the Institute of Advanced Manufacturing Sciences, Inc., which enables knowledge-based manufacturing. Included is a module called MetScript, which provides a tool for easy description of each production process including those characteristics unique to the plant or production

line step by step. MetScript provides companies the capability to document the complete production process. users can build upon the machining features that are standard within MetCAPP. For further information, contact Arthur S. Davies, Institute of Advanced Manufacturing Sciences, Inc., 1111 Edison Drive, Cincinnati, OH 45216; tel: 513/948-2000.

Jessup Engineering, Inc. has introduced an automatic hoist system for barrel zinc plating, which features a PLC-based control that can be customized to the specific zinc process in use: acid chloride, alkaline noncyanide or cyanide zinc. Control capabilities include customized graphic screens for easy system monitoring and on-line diagnostics. Interactive maintenance and troubleshooting help screens provide operator-friendly prompts. For further information, contact Ken Marvic-

sin, Jessup Engineering, Inc.; tel: 810/853-5600; fax: 810/853-7530.

Tubos Acero de Mexico (Veracruz, Mexico) has retrofitted their seamless tube mill, a retained mandrel continuous rolling mill, with a quality control system that reduces dimensional errors to virtually zero. The mil has a capacity of 500,000 metric tons per year. With the installation of this control system, dimensional rejects have been reduced to about 1% from the previous 5%.

The VMC 760/22 vertical machining center from Bridgeport Machines, Inc. is now available with a DX-32, 32-bit control, which provides faster part programming and machining throughput for improved shop productivity. The control includes interactive graphics as well as conversational and G-code programming. Menus guide the operator through the part programming and concurrent programming lets the operator program a new part while another is being machined. For further information, contact Bridgeport Machines, 500 Lindley Street, Bridgeport, CT 06606; tel: 800/243-4292.



Bridgeport Machines, Inc.

Strippit, Inc. has introduced HELIOS, a state-of-the-art stand-alone laser cutting system equipped with a fast axial flow CO₂ laser and advanced PC-based control. The system provides laser cutting efficiency and processing capability in a wide range of material types and thicknesses, producing high-quality parts with superior edge quality. HELIOS is designed to process stainless steel and aluminum sheets oxide-free through a 300 psi (20 bar) programmable assist gas feature. Two types of cutting heads are available. The system handles a maximum sheet size of 1250×2500 mm and has a positioning accuracy of \pm 0.05 mm/2540 mm with a repeatability of ± 0.01 mm.



Strippit, Inc.

Elwell-Parker, a manufacturer of large-capacity material handling equipment, has delivered three 125-ton automatic guided vehicles to a large midwest aluminum producer. These bidirectional, fully automatic vehicles are primarily designed for lifting and transporting finished aluminum coils from pick-up/drop-off stations. The vehicle can transport up to three of these coiled that weigh up to 64,000 lb each with a specially designed saddle. The vehicle's secondary function is to transport work and backup rolls that weight up to 220,000 lb

Measurement/Testing/Evaluation

Tinius Olsen Testing Machine Co. has introduced the LoCap universal testing machines, which offer range capacities from 0.01 to 30,000 kgf (0.02 lbf. to 60,000 lbf). The machines come in two load frame sizes, 15 in. and 22 in., with speed ranges from 0.05 to 20 in./min and 0.02 to 20 in./min, respectively. Another feature is an advanced electroluminescent digital indicating system with four available display channels and easy-to-read digits. For further information, contact Tinius Olsen Testing Machine Co., Inc., Easton Road, PO Box 429, Willow Grove, PA 19090-0429; tel: 215/675-7100; fax: 215/441-0899.

Metorex International has introduced the X-MET 920 x-ray fluorescence analyzer that operates with any DOS-based computer. The analyzer comes with software for everyday analysis and routine calibration with a minimum of keystrokes. The use of VGA graphics provides display of analytical results and spectra. The software allows customization for special ap-



Metorex International

plications. For further information, Metorex Inc., 860 Town Center Drive, Langhorne, PA 19047; tel: 215/741-4482; fax: 215/741-6385.

A low profile UV probe that is compact enough to fit under the vacuum frame of PCB production equipment without interfering with the normal machine processes has been introduced by International Light, Inc. The IL1441 Radiometer and Super Slim UV probe features a 2mm thick probe and is capable of performing continuous monitoring in microlithography



International Light, Inc.

and photoresist production lines, with a spectral response from 260 to 395 nm. For further information, contact Robert Angelo, International Light, Inc., 17 Graf Rd., Newburyport, MA 01950; tel: 508/465-5923; fax: 508/462-0759.

Optro-Mechanics Corp. has introduced *LCO-XJP Inverted Metallurgical Microscope Series* from China, which come in 4 models. Standard features include a magnification range from 50× to 1250×, three eyepiece sets (H5X, WF10X and W12.5X, WF10x eyepiece with scale, three achromat objectives (10×, 40×, 1000× oil), and a 170 mm×165 mm stage with three stage plates. For further information, contact Optro-Mechanics (USA) Corp., One Blue Hill Plaza, Pearl River, NY 10965-8667; tel: 800/890-3333; fax: 914/620-1950.

Foerster Instruments, Inc. has introduced the DEFECTOMAT EZ eddy-current testing instrument, which can be used in conjunction with a variety of different test coil systems to provide highly accu-



Foerster Instruments, Inc.

rate detection of surface defects in ferrous and nonferrous bar, wire, and tubing in diameters from 0.010 to 7.0 in. The system has a wide frequency range, permitting accurate testing of products in various sizes, shapes, and materials, and can be installed directly in a production line or off-line for determining product surface quality. For further information, contact J. Kitson, Jr., Foerster Instruments, Inc., 140 Industry Drive, RIDC Park, Pittsburgh, PA 15275; tel: 800/635-0613 or 412/788-8976; fax: 412/788-8984.

John Chatillon & Sons, Inc. has added Vitrodyne testers to its line of force measurement instruments and materials testing systems. The current Vitrodyne product line features a V-1000 tester with nine load cell capacities from 30 g to 10 kg and a V-200 miniature tester available in either 5 or 50 g maximum capacity. The testers come with a wide variety of stand-



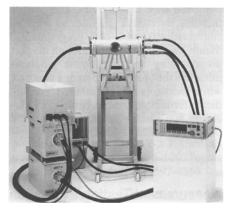
John Chatillon & Sons, Inc.

ard and specialized grips, as well as proprietary Material Witness software. For further information, call 800/241-5967.

Several publications on testing and characterization are available from ASTM and Butterworth-Heinemann. Cyclic Deformation, Fracture, and Nondestructive Evaluation of Advanced Materials: Second Volume from ASTM covers fatigue crack initiation, crack growth, and fracture toughness of advanced structural materials. Characterization of Organic Thin Films and Characterization in Com-

pound Semiconductor Processing covers different analytical techniques for each application. For further information contact: ASTM, 1916 Race Street, Philadelphia, PA 19103-1187; tel: 215/299-5585; 215/977-9679; Butterworth-Heinemann, 313 Washington Street, Newton, MA 02158-1626; tel: 617/928-2500; fax: 617/928-2620.

Philips Industrial X-Ray has introduced several industrial x-ray products. These include the MG 121 VF, a variable focal spot, sealed x-ray tube system and the MG 165 and MG 325 systems. All are ultrahigh stability x-ray systems utilizing fast ramp-up, quick responding 40 kHz technology. The MG 325 system can be equipped with any of the Philips metal ceramic x-ray tubeheads varying in focal spot sizes from 0.8 to 3.0 mm. Application include high production film exposure in-



Philips Industrial X-Ray

spection or high-throughput radioscopic inspection. For further information, contact Karen McGee, Philips Electronic Instruments, Philips Industrial X-Ray, 2975 Courtyards Drive, Norcross, GA 30071; tel: 404/368-4545.

International Research/Manufacturing Centers

To improve scientific literacy among all students, a national committee of teachers, scientists, and science educators has developed draft guidelines for what all students should know and be able to do in science. Although National Research Council has been coordinating the devel-

opment of the standards, the draft is the product of the efforts of many individuals and organizations. It will be reviewed by thousands of individuals in more than 200 focus groups at local, state, and national levels. The draft standard cover content, teaching and assessment standards, and

standards for science education programs and school systems in general. For further information, contact the National Research Council, 2101 Constitution Avenue NW, Washington, DC 20418; tel: 202/334-2138.

Literature/Data Sources

The Institute of Materials has published Metallurgical Modeling of Welding, which provides a broad overview of welding metallurgy's fundamental principles. The book describes a novel approach to the modeling of chemical, structural, and mechanical changes in weldments, both ferrous and nonferrous alloys. For further information, contact Ashgate Publishing Co., Old Post Road, Brookfield, VT 05036; tel: 802/276-3162; fax: 802/276-3651.

Sax's Dangerous Properties of Industrial Materials and Hawley's Condensed Chemical Dictionary is now available on interactive CD-ROM from Van Nostrand Reinhold, which enables users to search, access, and customize more than 5500 pages of current chemical data and descriptive information instantly. The first entry in Van Nostrand Reinhold's Electronic Reference Library, this CD-ROM has nearly 40,000 entries and more than 60,000 synonyms. For further information, call 800/842-3636.

FURON's eight-page RULON M 2000 design guide describes the five grades of the material, lists the technical specifica-

RULON M 2000 COMPONENTS

The high-performance family of materials engineered to solve your toughest design challenges.

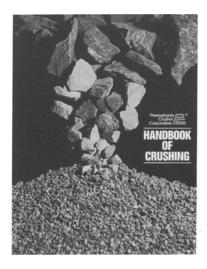
FURON

tions and characteristics of each one, and describes several applications where it has replaced metals, ceramics, and plastics in critical applications. For a free copy of this guide, contact FURON, 386 Metacom Avenue, Bristol, RI 02809; tel: 800/223-496, ext. 345.

John Wiley & Sons, Inc. has introduced the MIT Series in Materials Science and Engineering with several publications: Thermodynamics of Materials, Volume 1 and 11, and Physical Ceramics: Principles for Ceramics Science and Engineering. This series is based on the curriculum of the department of Materials Science and Engineering and will include textbooks for both the undergraduate and graduate level. For further information, contact John Wiley & Sons, Inc., 605 Third Avenue, New York, NY 10158-0012; tel: 212/850-6000; fax: 212/850-6088.

The Aluminum Association has published the Aluminum Design Manual: Specifications and Guidelines for Aluminum Structures. This manual includes load and resistance factor design specifications, allowable stress design rules and other design guidelines, illustrative design examples, and extensive tables of material and selection properties. For further information, contact the Aluminum Association, 900 19th Street NW, Washington, DC 20006; tel: 202/862-5156 or to order 301/645-0756.

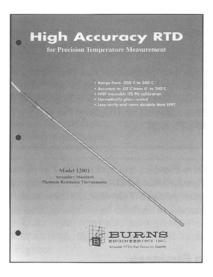
Pennsylvania Crusher Corporation has re-issued its Handbook of Crushing,



Pennsylvania Crusher Corporation

which provides detailed information on crushing technology including reduction methods, screen analysis, measurement of crushing resistance, abrasiveness, power requirements, and other issues. It also describes various types of crushers and their applications. For a copy, contact Lee Doyer, Pennsylvania Crusher Corporation, Box 100P, Broomall, PA 19008; tel: 610/544-7200; fax: 610/543-0190.

Burns Engineering Inc. has published Catalog 984, which describes its *Model 1200 platinum resistance thermometer*. Features described include high accuracy,



Burns Engineering, Inc.

stability, price, traceability, and the recalibration program. For a copy, call 800/328-3871.

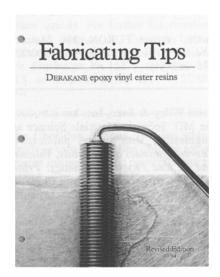
A product bulletin, describing the properties, uses and technical specifications for PLV 2000 and PLV 2100 fluoroelastomer adhesives and sealants, is available from Pelmor Laboratories, Inc. The two-page data sheet describes the various characteristics, cites numerous industrial uses, includes a chart of physical properties and typical values, and provides application data. For a copy, contact Pelmor Laboratories, Inc., 401 Lafayette Street, Newtown, PA 18940-0309; tel: 800/772-6969; fax: 215/968-6415.

Peterson high performance silver brazing flux is described in a full-color brochure. Applications and technical data are provided. For a free copy, contact Michael P. McBride, Peterson Fluxes, Force Industries, 28 Industrial Blvd., Paoli, PA 19301; tel: 800/647-3575; fax: 800/647-2375.

Rapra Technology Ltd. has published three market reports titled *Polymers for Wire and Cable, Commodity Plastics-As Engineering Materials, and Functional Additives for Plastics*. Each report discusses recent technical developments, marketplace trends, standards and regulatory developments, and applications. For further information, contact Rapra Technology Ltd., Shawbury, Shrewsbury, Shropshires, SY4 4NR, UK; tel: 44/1939/250383; fax: 44/1939/251118.

Crystallume has published a product brochure for its DCC diamond-coated carbide cutting tool inserts. The brochure describes properties and performance of these inserts. Advantages are also describe, including up to 50× better wear live than conventional tooling. For a copy, call 800/7894DCC.

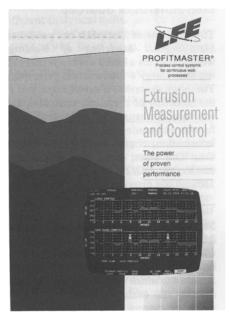
Dow Plastics has updated its Fabricating Tips bulletin on DERAKANE epoxy vinyl ester resins. This version has been expanded to include new information deal-



Dow Plastics

ing with the fabrication of fiber-reinforced plastic linings, the use of styrene suppressants, a troubleshooting guide, and fabrication tips for FDA/USDA compliance. Information for safe handling and storage of the resins also is included. To order, contact Dow's Customer Information Group at 80/4414369 and reference #A2462.

A 6-page, 4-color brochure is available from LFE covering their ProfitMaster Extrusion Measurement and Control



LFE

product line. This family of control systems provides superior measurement accuracy and high speed digital control of the extrusion process. Applications and design features are described. For further information, contact LFE, 55 Green Street, Clinton, MA 01510; tel: 508/365-3453.

In Business

Davy International has formed a new group in its Automation Division to offer oxygen steelmaking automation technology to the steel industry. The company also has a contract to supply ancillary equipment, design engineering, installation and startup assistance for a Kawasaki Top Blowing oxygen lance system at the existing No. 1 RH degasser for National Steel Corporation, Great Lakes Division.

Greenfield Industries, Inc. has acquired Carbidie Corporation from Spreckels Industries, Inc. Carbidie is a leading on-demand producer of custom-made tungsten carbide part for use in the tool and dies and oilfield equipment industries.

Air Liquide America Corporation is relocating its headquarters from Walnut Creek, California to Houston, Texas by September 1995.

The Hoechst Celanese Corporation Advanced Materials Group has received ISO 9002 registration for its thermoplastic engineering plastics manufacturing facility in Shelby, North Carolina. The company is also expanding its capacity for Vectra liquid crystal polymer through a 6.2 million pounds/yr (2,800 metric tons) polymer manufacturing plant in Japan.

Cold Metal Products, Inc. has opened a sheet steel service center at its plant in New Britain, CT. The new service center is utilizing part of Cold Metal's existing specialty strip facility, but will also be a separate operation focused on processing truckload quantities of hot-rolled, cold-rolled, and galvanized sheet steel.

Shrewsbury Molding Facility of AMP Inc. and the Actuators and Fuel Systems Components Division of Siemens Automotive have received the 1994 CASA/SME Industry LEAD Awards from the Computer and Automated Systems Association of the Society of Manufacturing Engineers. This award recognizes teams from industry for their leadership and excellence in the application and development of integrated manufacturing.

ARCO Chemical Company has realigned its regional structure by creating a chief operating office with worldwide responsibility for all the commercial activities of the company. The company will retain strong regional presence in Europe,

Asia, and Americas. Marvin O. Schlanger has been elected Executive Vice President and Chief Operating Officer.

Stopol Inc., a reseller of plastics manufacturing equipment, has moved to new head-quarters in Solon, OH. The company was previously located in Cleveland.

General Magnaplate Corporation has signed a joint venture agreement with the Aurora Group of St. Petersburg, Russia to establish Russia's first complete, state-of-the-art metal treatment center.

Molycorp, Inc. is installing more pumping equipment at its underground molybdenum mine to hasten water removal in case the company decides to reopen the facility. The mine could by in production by July 1996 at an annual rate of 14 to 15 million pounds per year.

The Edison Welding Institute has teamed with the Great Lakes Industrial Technology Center to implement a program to provide Ohio industry and EWI members with better access to NASA and other federal technologies.

Pierce & Stevens Corp. has acquired Adhesives Aplicados CK, S.A. de C.V., a Mexican producer of adhesives.

Eumuco AG and SMS Hasenclever GmbH of Germany, manufacturers of extrusion and forging equipment, have merged due to the worldwide decline of these markets. The two joint companies are based at Leverkusen.

The American Society of Mechanical Engineers has signed agreements of cooperation of technical exchange with the Colombian Society of Electrical and Mechanical Engineers and Romanian Society of Mechanical Engineers, as well as the Institution of Engineers in Singapore.

Hayes-Albion Corporation, a whollyowned subsidiary of Harvard Industries, Inc., has been selected by General Motors to supply the magnesium steering column support bracket for five of the models the automaker will introduce during the second half of the 1990s.

Rhone-Poulenc has transferred its toluene di-isocyanate activities to ARCO Chemical. ARCO Chemical will market the product for ARCO, who will continue to manufacture the product at its sites in France.

United States Filter Corporation has acquired L'eau Claire International, Inc., a firm specializing in upflow media filtration. With this acquisition, U.S. Filter now

leads the industry in upflow filtration installations, with over 800 worldwide.

DuPont's Chestnut Run testing facility is the first laboratory of a major plastics supplier to receive ISO accreditation by the American Association for Laboratory accreditation. The independent accreditation is in response to General Motors' request that suppliers provide test data on parts and polymers by both international and American test methods.

PPG Industries is evaluating the possibility of constructing a wholly-owned precipitated amorphous silica plant in Mexico. The plant would use new proprietary technology and serve tire and rubber, toothpaste, and absorptive/carrier customers throughout North and South America.

Houghton International Inc. has purchased the CMT Group, a major European chemicals manufacturer. CMT's current product line includes soluble coolants, metalworking oils, hydraulic oils, emulsifiers, cleaners, rust preventives, and additive packages.

Howmet Corporation has become an approved source of titanium castings for use in critical airframe and other structures on the U.S. Air Force's next-generation fighter aircraft, the F-22 Advanced Tactical Fighter.

Kudos

Liya L. Regel, Clarkson University research professor and Director of the International Center for Gravity Materials Science and Applications, is the first woman in the world to receive membership in the Basic Science Section of the International Academy of Astronautics. She was elected for her work in testing the effects of low and high gravity on materials processing.

Daniel T. Koenig, senior vice president of manufacturing technology at AAVID Engineering, Inc. has been elected president of the American Society of Mechanical Engineers.

James H. M. Wilde, consultant and former magnesium product manager for Dow Europe, has been selected to represent the International Magnesium Association in Europe.

Robert H. Stevenson Jr. has been named new product/distribution manager for Furon, Advanced Polymers Division. In this position, he will be responsible for new product sales and marketing.



Robert H. Stevenson Jr.

Arden C. Sims, president and CEO of Globe Metallurgical Inc., has been appointed to a two-year term on the Trade and Environment Policy Advisory Committee. This newly created federal board will be responsible for providing trade and environmental policy advice to the U.S. Trade Representative and the EPA.

Spaulding Composites Company has appointed the following as company officers: Roger M. Kirkpatrick, Chief Operating Officer; Richard L. Berger, President and Chief Operating Officer; Alfred L. Whiting, Chief Financial Officer; and Gerald L. Lanier, Senior Vice President.

Duraloy Technologies, Inc. has appointed *Vincent A. Sciavoni* as president. He was previously Manager of Hot Mill Operations at Nucor Steel's Flat Rolled Division.

Dan L. Griffith, chief financial officer of Bridgeport Machines, Inc. has assumed the presidency of the company.



Raymond Hemphill



David Wert

Raymond Hemphill and David Wert of Carpenter Technology Corporation have been honored for the development of Carpenter Aermet 100 alloy by the National Association for Science, Technology and Society, as one of the most significant advances in materials of the last decade.

Dr. Xinsheng Zhang has been named applications development manager for extruded products at Cabot Corporation's North American Industrial Rubber Blacks Business.

James R. Brower, a senior technical specialist at GE Silicon, has received a 1994 Award of Merit from ASTM for meritori-

ous service to Committee C-24, providing practical knowledge and realistic testing, and for actively participating in the development of at least 20 ASTM standards. Roy W. Morrow, a developmental chemist at Martin Marietta Energy Systems, has received an Award of Merit from Committee C-26 on Nuclear Fuel Cycle for outstanding contributions to the development and maintenance of analytical test method standards for nuclear materials. J. Charles Webster, principal engineering specialist with Ford Motor Co., has been named Fellow of the Society for his significant contributions to the development of standards for metal powders and metal powder products. James C. Myers has also been elected as Chairman of Committee C-24 on Building Seals and Sealants.

Ronald J. Hudzik has been appointed sales manager for **Defiance Tooling Systems**. Hudzik was sales manager for Jason Tool & Engineering Co.



Ronald J. Hudzik

Russell G. Altherr, previous of American Steel Foundries, has received the 1994 Elmer A. Sperry Award for advancing the art of transportation. Altherr was presented the award for the conception, design, and development of a slackfree connector for articulated railroad freight cars.



Kevin Clark



Jerry Haller

Midland Aluminum Corporation has promoted Kevin Clark as Branch Manager, who will be responsible for day-to-day operaincluding tions. purchasing, sales, and warehouse inventory. Jerry Haller has been appointed Outside Sales Representative for several local counties.

Joseph A. Holmes, first director of the U.S. Bureau of Mines, has been inducted into the American Mining Hall of Fame in Tucson, Arizona. The Hall recognized Holmes for his work on mine safety and his contributions to mining in the United States.

PPG Industries
has appointed
Thomas M. Von
Lehman as vice
president of purchasing and distribution. He was
formerly director
of corporate planning.



Thomas M. Von Lehman