Motor fair attendees view product demonstrations conducted by the Oriental staff.

Oriental Motor Fair

COVERS MUCH MORE THAN THE BASICS

The question is whether or not a customer can save time and money using a step motor. It's followed by another on the differences between a brush and brushless motor. The discussion continues with topics on tachogenerators, permanent magnets, inertia calculations and torque motors. What resembles a high school science fair at first glance is actually an informative and productive way to spend a day discussing the motor industry.

The 2008 Oriental Motor Fair and Seminar recently took place in the Chicago area in an effort to underline Oriental products and put them to the test using real world applications. The seminar allows engineers, maintenance personnel and purchasing managers to get together to talk shop and learn some additional concepts specifically for these applications.

With 125 years of experience, Oriental Motor knows firsthand how important quality, delivery, service and support are to its customers. Instead of boasting this experience in an advertising campaign, Oriental takes its mechanical and sales engineers on the road to show how its products work and why they're beneficial.

"Customers can come and see all of our products and participate in our seminars to better understand the product line and gain an understanding of the global support Oriental Motor brings to motion control," says Rob Cheatham, senior sales engineer at Oriental Motor USA.

The motor fair kicks off with an introduction highlighting the 30 years the international company has served customers in the United States and Canada. Oriental Motor was originally founded in 1885 in Japan, but made its U.S. debut in 1978 with a variety of fractional HP products for position control, velocity control and temperature control.

The eight-hour, technical presentation lets attendees see how specific motors are chosen for certain applications and why these choices are made. At the Chicago seminar, guests

were treated to a PowerPoint presentation on motors in a bottling application. Engineers took attendees step-by-step through the various motors used in bottle removal, cooling, inspection, filling, capping, label placement and packaging. These steps were supplemented with DVD demonstrations and motor-sizing options. A soundtrack provided songs with themes that complemented the product demonstrations.

Each section began with the engineers analyzing the various criteria needed for the application. In the bottle diverter section, for example, a list of needs was presented for the diverter, and these needs were addressed with motor sizing options.

If attendees wanted to see these specific applications, the product room next door provided motion control demonstrations and hands-on examples. Engineers were available at each station to answer questions and discuss the various applications on display.

"Having all of our products available for the attendees to see, brings us one step closer to finding a solution to their applications," Cheatham says. "Everyone likes to touch and feel products versus just looking at it in a catalog or on a website."

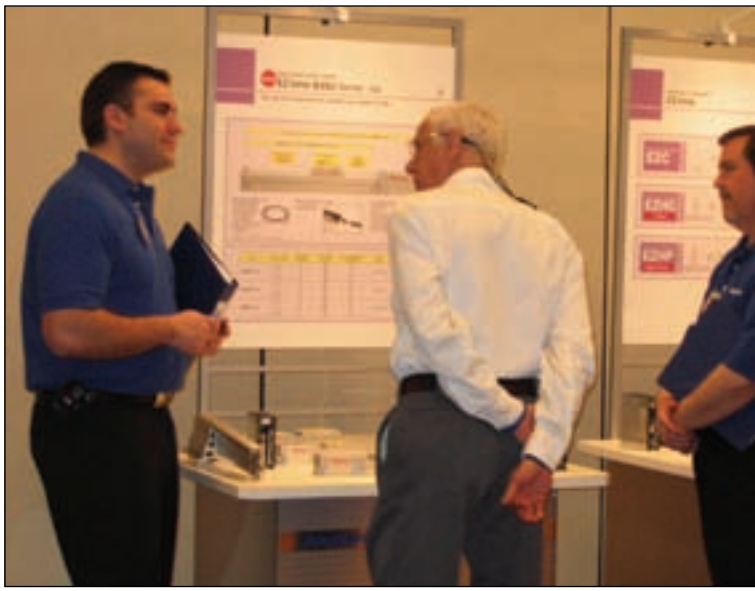
The bulk of the one-day event, however, took place in the meeting room where Oriental engineers breezed through eight sections of motor options for the bottling application. Attendees were given a printed copy of the PowerPoint presentation and could jot down notes during the event. If an engineer did not have an answer for a particular question, there was always a colleague in the back of the room ready to provide additional information.

Oriental did an excellent job of distributing information to a wide audience. Some attendees had an extensive background in motor applications while others had minimal exposure. The company was able to bring a diverse group together and provide information that everyone could benefit from.

In an effort to continually push the seminar forward, Oriental always takes feedback into consideration for future presentations. The company recently reformatted the seminar based on information provided by previous attendees. At the end of the program, guests were asked to fill out a brief questionnaire and turn it in with comments and suggestions.

The seminar was educational and far more informative than just a sales pitch. Attendees received an extensive demonstration of the product line via industry examples. Engineers explained why some motors worked better in certain conditions. They also discussed the longevity and accuracy of the motors in question.

For more information on the Oriental Motor Fair and Seminar, visit *www.orientalmotor.com* or call (800) 418-7903.



Rewind Seminar

JUMP STARTS MOTOR, GENERATOR KNOW-HOW

Calling on engineers and maintenance power plant personnel, industrial users of low- and medium-voltage motors and generators and motor repair shop staff. The TECO-Westinghouse Motor Company (TWMC) hosts the EPRI Motor/Generator Rewind Seminar. The three-and-a-half day tutorial is intended for specialists and non-specialists alike who specify, contract and accept motor generator repairs and rewinds. Attendees come from a range of companies such as light electric utility, nuclear and motor repair plants and, "We get quite a mixture of people," says Jim Oliver, the seminar founder.

The Electric Power Research Institute (EPRI) of Palo Alto, California, came up with the idea for the course, which Oliver first wrote as a motor rewind book for the association. Oliver coordinates the whole seminar, which he began 10 or so years ago when the EPRI decided they wanted a course based on his book. The seminar has been held at different repair shops over the years, but 2008 is the fourth year the course is located at TWMC, just 20 miles north of Austin, Texas. EPRI licenses the course to Oliver because "They were restricted just to inviting EPRI members whereas I can invite anybody," he says.

The program covers material on increasing capacity of nuclear power plant motors, turbine generator rewinding practices, motor testing, buying new motors, VPI resins and tiered motor maintenance. IEEE, NEMA and API industry standards are covered along with insulation materials, processes, coil design and manufacturing, stator cores, core testing, rotors and bearings. Attendees learn the intricacies of rewinding medium-voltage electric motors and generators based on design and function essentials, and how to develop rewind specifications for motors and generators from 480 V through 13.2 kV. One highlight of the course is a tour of TWMC's 500,000-square-foot motor and generator repair and manufacturing facility, which is equipped with complete test and engineering services. Groups of four or five people each gather for the approximately three-hour tour. The length depends on how many questions are posed by attendees. Another highlight for many participants is the coil-making exhibits TWMC sets up as part of the tour.

The seminar is taught by four instructors, including Oliver, Jim Michalec, Elton Floyd and Mike Howell. They have decades of experience in significant electric industrial areas, and TWMC engineers are available for consultation on

specific technical issues. The instructors often swap topics with each other, demonstrating their versatility on the subjects, but they each have a group of segments they tend to teach.

Every year Oliver tries to improve the program by making minor changes or additions. "We give a critique sheet and carefully go over responses. We get good ideas from them," he says. "We take all comments very seriously."

A comment made one year was to exclude testing qualifications because the topic interrupted the flow of the seminar, which Oliver came to agree with. Two years ago, he brought in the subject of steam turbine generators.

Last year's seminar attracted 53 attendees. In recent years, international participants have come from Thailand, Spain, France and Korea. In addition to the presentations and TWMC tour, the seminar includes lunches and an annually upgraded, four-volume seminar book. Oliver says they always have extra books on hand to anticipate any last-minute registrants.

The EPRI Motor/Generator Rewind Seminar takes place July 15–18 at the TECO-Westinghouse Motor Company in Round Rock, Texas. TWMC supplies AC and DC motors and generators in a range of HP ratings used to drive pumps, fans, compressors, rolling mills, grinders, crushers and other rugged applications. The company's products are found worldwide in petroleum, chemical, pulp, paper, mining, marine propulsion, steel, electric utility and other industries. The test facilities include full-voltage, full-speed run-up, heat run, locked rotor, sound level, vibration analysis and insulation testing. For more information including registration, contact Jim Oliver at *joliver003@aol.com*.

calendar

June 24–25—European PLM Summit. Diagora Espace De Congrès et d'Exposition, Toulouse, France. The fourth installment of this conference and networking event attracts leading practitioners of product lifecycle management (PLM). The two days are scheduled with keynote conference sessions and workshops that address the business and technology forces affecting PLM implementation. There are opportunities to connect with other attendees in pre-arranged, interactive one-on-one meetings where the business strategies of PLM are discussed and how they can improve the design, delivery and development of new products. The event intends to demonstrate how product lifecycle management is important to manufacturing, supply chain and IT operations. Some technical sessions will address linking design with sourcing and procurement decisions—extended supply chain, product maintenance and support and integrating PLM with existing manufacturing execution systems. For more information, visit *www.plmsummit.com.*

June 24–27—EXPO PACK Mexico. Centro Banamex, Mexico City, Mexico. Gain access to the packaging industry in Mexico and Central America at this comprehensive packaging machinery and materials tradeshow in Mexico. More than 860 exhibitors appear at Expo Pack Mexico, showcasing packaging and processing machinery, materials, components and containers, to provide solutions for processing, packaging, sorting and distributing products. The 2007 show drew 32,000 attendees from 34 countries representing a wide range of industries including automotive, tools, electric, electronics, medical and chemical. Expo Pack Mexico 2008 is co-located with Procesa, the food and beverage processing machinery and equipment show for Mexican end-users. The events are produced by the Packaging Machinery Manufacturers Institute (PMMI). For more information, visit *www.expopack.com.mx*.

July 9–11—ProPak China. Shanghai New International Expo Center (SNIEC), Shanghai, China. ProPak China features the 14th International Processing, Packaging and End-Line Printing Exhibition. As the only integrated processing and packaging trade event in China, ProPak caters to buyers, sellers, manufacturers, distributors and suppliers worldwide involved in food, beverage, pharmaceutical, cosmetic, toiletries and light industries. The exhibition highlights processing and packaging machinery, materials and related technology. The 2007 event attracted 517 companies from 24 countries, and the exhibition was visited by over 13,000 attendees from more than 80 countries. The 2008 event has expanded to fill a third hall in response to growth and demand. For more information, visit *www.propakchina.net.*

July 15–17—SEMICON West. Moscone Center, San Francisco. "Infinite Innovations, Infinite Ideas" is the slogan for Semicon West, where companies, technologies and people meet that advance micro- and nano-electronics design and manufacturing. Information is presented by industry technologists about the latest developments in areas like semiconductors, MEMS, renewable energy applications, semiconductor test, advanced packaging and wafer processing. Some major themes that will be addressed this year include semiconductors in transition, the mobile electronics revolution and the integration of design, production and test. Registered visitors receive an online "personal assistant" to search and find the products, exhibitors, people and events that match their specific interests. For more information, visit *www.semiconwest.org*.

August 4–8—Rotordynamics/Magnetic Bearings Short Course. University of Virginia Mechanical Engineering Building, Charlottesville, VA. This short course, organized by the Rotating Machinery and Controls (ROMAC) Industrial Program at the University of Virginia, covers many topics relating to rotordynamics, bearing dynamics, applied dynamics and topics on magnetic bearings for industrial rotors. Last year's short course covered unbalance response and rotor balancing, stability of industrial compressor rotors, advanced fluid film bearing analysis, compressible flow seals, advanced pump analysis, motors, turbines and aircraft engines. Also covered in last year's course was magnetic bearing design and control theory for magnetic bearings along with specifications for industrial rotors. University of Virginia faculty and students are among presenters, and case histories are given by ROMAC industrial members.

September 8–11—SAMPE Fall Technical Conference and Exhibition. Memphis Marriott Downtown, Cook Convention Center, Memphis. Representing many sides of material and process engineering industries, around 800 engineers, R&D engineers and educators attend the Society for the Advancement of Material and Process Engineering's (SAMPE) annual technical conference. Related topics include chemical engineering, design, operation and maintenance of chemical and material manufacturing processes. Technical sessions and panels discuss advanced materials and applications while the two-day exhibition consists of distributors and manufacturers of advanced materials showcasing new products and services. This year's SAMPE conference is co-located with the American Society for Composites and ASTM International, a voluntary standards developing organization. Significant contributions were made by the Air Force Office of Scientific Research. Some of the panels and featured talks include industrial applications of multifunctional materials, ionic polymer-metal composite: soft actuator and sensor and polymer nanocomposites research in Canada.