

Induction Heating Seminar

LEADS TO BIG PLANS IN 2008



The first Mexican induction heating and NDT seminar, held at the Plaza Camelinas Hotel in Queretaro, Mexico, featured several world-recognized experts of induction technology. Topics included electromagnetic and metallurgical aspects of induction heating, heat-treating and forging, troubleshooting, case studies and solutions, modern power supplies, monitoring and non-destructive testing.

According to Dr. Valery Rudnev from Inductoheat, a program entitled, "Intricacies of Induction Hardening and Tempering of Gears and Critical Components," was originally scheduled to be a 35-minute presentation.

"Due to numerous requests we extended the subject," says Rudnev. "It became a 50-minute lecture on the different aspects of induction heat treatment of gears including materials, microstructure, modes of induction heating ("tooth-by-tooth," "gap-by-gap," spin hardening, etc.), power control modes, stresses, hardening profiles, electromagnetics, computer modeling, etc."

David Popkey, manager of international sales at Inductoheat, was pleased with the turnout at the event. "We had a full house for the program. The Q&A session went two hours longer than we expected, which was a pleasant surprise."

Rudnev agreed. "The most impressive part was that nobody disappeared during the seminar. Due to the overwhelming amount of questions, we stayed longer at the end of each day."

Inductoheat, Incotec and IBG sponsored the seminar in

a joint effort that included more than 50 attendees from 15 automotive heating, heat-treating and forging companies.

According to the company's press release, demand for more information has led Inductoheat to plan additional seminars for 2008 in Monterrey and Mexico City. For more information, visit www.inductoheat.com.

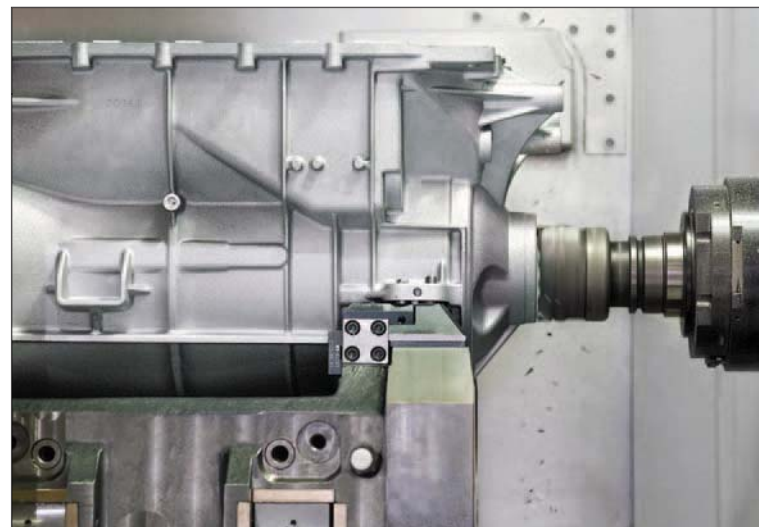
MAG Powertrain

INSTALLS MQL SYSTEM FOR FORD

MAG Powertrain is installing a Minimum Quantity Lubrication (MQL) machining system at the Ford Van Dyke Transmission Plant in Sterling Heights, Michigan. This is the second MQL system without any wet machining operations at the plant. A hybrid system is also in place to produce aluminum transmission cases, converter housings and valve bodies for Ford's six-speed transmissions. The new MQL system is scheduled for completion by the end of 2007.

According to the company's press release, MQL systems reportedly yield yearly savings of approximately 30,000 gallons of coolant oil, with water reduction of more than 250,000 gallons and large reductions in requirements for compressed air usage.

In a MQL system, a fine oil mist replaces the traditional coolant flooding used to lubricate and cool the cutting tool and workpiece. Chips are evacuated through the use of an integrated vacuum and safety system. Property algorithms



work together with temperature monitoring to eliminate heat-related distortion.

The new system at the Van Dyke plant will include 52 MAG Powertrain SPECHT horizontal 4- or 5-axis machining centers, designed for medium- to high-volume production applications. Each operation can have its own lubricity level as opposed to a centralized coolant system. The machines can also be moved easily as production requirements change.

MAG Powertrain designs and builds manufacturing systems for automotive, diesel and heavy industrial machinery. For more information on their MQL systems, visit www.mag-ias.com.

Performance Gear

CELEBRATES 10 YEARS OF OPERATION

Performance Gear Systems Inc. celebrated its 10th year in business on October 31, 2007. The company began as a gear design and consulting operation before becoming a molded gear manufacturer.

While other molding operations moved to offshore facilities, Performance Gear continued to grow as a specialty gear molder in the United States. Repeat business and new accounts have spurred the growth.

According to Keith Hansen, marketing director at Performance Gear, the methods of design, quality, inspection and manufacturing are specific to plastic gears. "We take our customers' proprietary design very seriously. After all, the gears are normally the heart of our customers' mechanism."

Encore Group

JOINS DURA-BAR DISTRIBUTORS

Dura-Bar, the only North American producer of continuous cast iron bar stock, recently announced the addition of the Encore Group of Edmonton, Alberta as a distributor. The Encore Group consists of Encore Metals and Team Tube in Canada. It's a subsidiary of the Reliance Steel and

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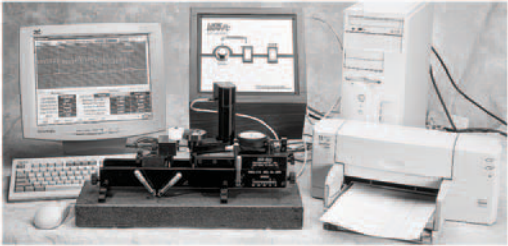
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NEWS

Aluminum Company.

According to the company's press release, the Encore Group will be able to supply Dura-Bar's continuous cast gray and ductile iron bar stock in a wide variety of shapes and sizes.

"We're pleased to welcome the Encore Group to our distribution network," says Frank Abruzzo, Dura-Bar's vice president of sales and marketing. "Encore's 17 locations and processing capabilities will benefit Dura-Bar users in those areas."

Niagara Gear

EXPANDS PLANT IN NEW YORK

A recent 8,000-square-foot expansion project at Niagara Gear Corporation in Buffalo, New York, brings the total plant size to more than 30,000 sq. feet. The completed project features a gear cutting center, gear grinding department and new manufacturing and engineering offices.

According to the company's press release, the facility will allow the company to implement a time-efficient inventory

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system aimed at improving workflow. The expanded space also gives Niagara the ability to add new equipment, such as a recently purchased CNC cylindrical grinding machine.

“The expansion opens the door for future capital equipment purchases because we now have the floor space to do it,” says Robert Barden, vice president and general manager at Niagara Gear Corporation. “This signifies positive growth for Niagara Gear.”

ECM

COMMEMORATES 10 YEARS IN UNITED STATES

ECM, a manufacturer of vacuum carburizing furnaces, recently announced its ten-year anniversary in the United States. The U.S. headquarters, located in Kenosha, Wisconsin is set up for testing customer programs with full metallurgical support. ECM USA focuses on low-pressure vacuum carburizing in North America with a concentration on sales, installation and service operations. While its main headquarters is located in France, the company has offices in the United States, China and Japan as well as representatives in Mexico and South America.

Marposs

ACQUIRES CONTROL GAGING INCORPORATED

Marposs S.p.A. of Bologna, Italy recently announced the acquisition of Control Gaging Incorporated of Ann Arbor, Michigan. According to the company’s press release, existing CGI management and personnel will be retained.

“CGI and Marposs are industry leaders in gaging and process control systems for manufacturing industries world-

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NEWS

wide. Each company has unique products and business systems that help their customers remain globally competitive," says Marposs S.p.A. president Stefano Possati.

Control Gaging Incorporated produces quick set-up gages and process control systems for grinding machines and other machine tools. Marposs S.p.A. develops inspection and process control technologies for a broad range of manufacturers.

"Both companies are excited about the new opportunity this acquisition creates," says Edward Vella, president of U.S. operations for Marposs. "It will help us add even more value for our customers as we continue to support their machining process control needs."

Bodine Electric's Low-Voltage Products

COUNTER HIGH ENERGY COSTS

With rising energy costs and environmental concerns, Bodine Electric recently announced the release of a low-voltage product line. Bodine engineers have worked with OEMs to develop gearmotor, motor and control efficiency products like solar powered water circulators and power generating facilities.

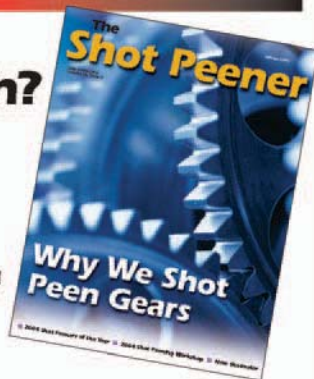
These products can either run independently of the electrical grid or utilize solar power as an energy source. According to the company's press release, applications for these devices include medical devices, labeling equipment, printing presses, photocopiers, scientific/laboratory equipment and factory automation.

Bodine products are available through a distribution network or sold directly to OEMs. The company offers more than 1,000 standard products and thousands of custom-designed, fractional horsepower electric motors, gearmotors and motion controls.

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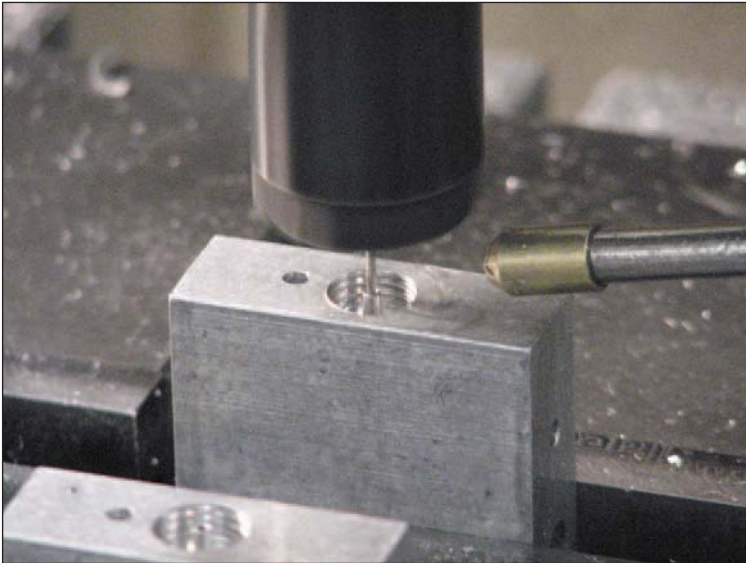
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SME

RELEASES LATEST VIDEO
IN MANUFACTURING
INSIGHTS SERIES



The Society of Manufacturing Engineers (SME) recently announced the release of *Minimum Quantity Lubrication*, an addition to the SME Manufacturing Insights Video Series. According to the organization's press release, the video surveys four different manufacturers that use MQL to apply only the minimum amount of lubricant needed for each job.

Companies involved in the survey include the Ford Motor Co., Amerimax, Advance Mold and World Machinery and Saws System Co. These companies previously relied on traditional flood-coolant methods that create high handling, cleaning and disposal costs.

"This video is well done and should be considered a 'must see' for engineers considering flood applications for new machine tool systems," says Gary Rodak, president of Machining Efficiencies, Inc.

The 40-minute video costs \$149 or \$129 for SME members. It can be ordered online at www.sme.org/store or by phone at (800) 733-4763.

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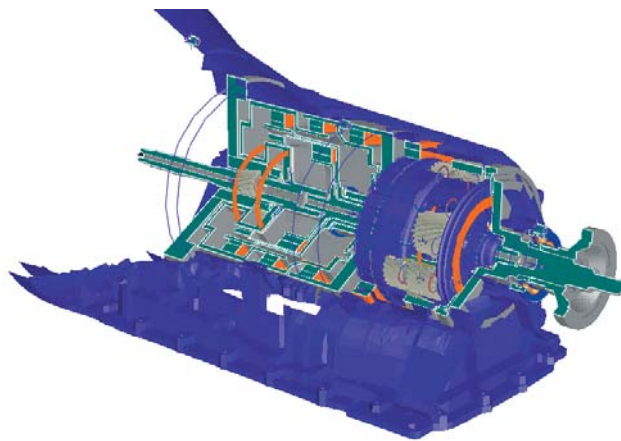


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Romax

PROVIDES FORD WITH ANALYSIS SOFTWARE



The NVH and bearing analysis software from Romax Technology, Inc. has been designated as the principal engineering tool for predictive analysis of automatic transmission gear whine at Ford Motor Company.

“The Romax analysis system software will provide Ford with a significant reduction of CAE (computer-aided-engineering) processing time,” says Dr. Takeshi Abe, Ford technical fellow, NVH (noise vibration harshness).

According to the company’s press release, the software has been integrated into Ford’s transmission design and development process after extensive correlation and validation work between Romax and Ford’s transmission NVH engineering team. The specific software for Ford offers integrated systems for NVH and bearing analysis through software tools, training and engineering services.

“The Romax tools allow us to transform the transmission NVH process from a test-based hardware iterative approach to a process focused on up-front design optimization. This new process not only provides cost savings by decreasing repetitive hardware testing, but most importantly, the software makes it possible to design quiet transmissions more accurately than ever before,” says Takeshi.

Mario Felice, technical leader, powertrain NVH CAE, at Ford, adds, “Designing a nominal gear train that meets customer targets is just not enough anymore. Based on the technical collaboration between Romax and Ford, statistical modules have been created that allow us to factor in the manufacturing variability and initial design tolerances as part of the upfront gear whine evaluation process. This provides invaluable insight into the robustness of the gear train design early in the development process.”



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