

Gear Education at Gear Expo

Gear Expo provides an opportunity to learn from the industry's experts by walking the aisles and talking to exhibitors. Visitors to Gear Expo 2001 also can take advantage of some formal training and educational opportunities sponsored by AGMA and SME.

AGMA'S FALL TECHNICAL MEETING

This year's fall technical meeting will be held in Detroit just prior to Gear Expo, from October 3-5, allowing visitors to attend both events in just one trip.

About a dozen papers are scheduled to be presented at the meeting. The titles include:

- "Carbide Hobbing Case Study," Yefim Kotlyar, Bodine Electric Co.;
- "Helical Guide Constraints on the Gear Shaping Process: How a CNC Guide Will Change the Way the Gear Manufacturing Community Views Shaping," Dr. Klaus Peiffer, Gleason-Pfauter Maschinenfabrik;
- "The Ultimate Motion Graph for 'Noiseless' Gears," Dr. Hermann Stadtfeld, The Gleason Works;
- "Automated Spiral Bevel Gear Pattern Inspection," Son Nguyen, IIT Research Institute;
- "Traceability of Gears, New Ideas, Recent Developments," Frank Hartig, Franz Waldele, Physikalisch-Technische Bundesanstalt;
- "How to Inspect Large Cylindrical Gears with an Outside Diameter of More Than 40 Inches," Guenter Mikoleizig, Klingelnberg Söhne GmbH;
- "The Application of Chemically Accelerated Vibratory Finishing for the Elimination of Wear and Pitting of Alloy Steel Gears," Lane Winkelmann, Dr. Gary Sroka, REM Chemicals Inc. & Al Swiglo, IIT Research Institute;
- "The Effect of Spacing Errors and Runout on Transverse Load Sharing and the Dynamic Factor of Spur and Helical Gears," Husny Wijaya, Donald Houser, Jonny Harianto, The Ohio State University;
- "New Opportunities with Molded Gears," Roderick Kleiss, Alexander Kapelevich & Jack Kleiss Jr., Kleiss Gears Inc.;
- "Design Technologies of High Speed Gear Transmission," Jeff Wang, Nuttall Gear;
- "Performance-Based Gear-Error Inspection, Specification, and Manufacturing—Source Diagnostics," William Mark, Cameron P. Reagor, Drivetrain Technology Center, Penn State University; and
- "Kinematic and Force Analysis of a Gear System with Separation of Sliding and Rolling Between Meshing Profiles," Dmitry Tananko, Eugene Rivin, Wayne State University.

In addition to the technical papers, the fall technical meeting will include several presentations on topics of interest to the gear industry. The topics are:

- "Current Trends in the Gear Market Place," presented by Terry Orr, Lufkin Industries Inc.;
- "Important Trends in Standards for Gear Tolerances," panel discussion presented by Edward Lawson, M&M Precision Systems Corp., Robert Smith, R. E. Smith & Co. Inc. & William Bradley, AGMA; and
- "The Gear Engineer's Relation to Product Liability," presented by Peter Lamb, AGMA legal counsel.

For information about attending AGMA's fall technical meeting, contact the American Gear Manufacturers Association by telephone at (703) 684-0211 or fax at (703) 684-0242.

AGMA Seminar

The American Gear Manufacturers Association will hold a special session of the basic course from its Training School for Gear Manufacturing.

The course will be presented Oct. 8-10 alongside Gear Expo 2001 at the Cobo Center in Detroit. The special session will consist of the classroom-training part of the regular course, held at Richard J. Daley College, in Chicago, IL.

The session costs \$450 for AGMA members and \$575 for nonmembers. Session hours are from 8 a.m. to 12 p.m. For more information about the session, contact AGMA by telephone at (703) 684-0211 or by sending e-mail messages to gearexpo@agma.org.

SME Seminars

The Society of Manufacturing Engineers will present four gear-related seminars Oct. 8-10 alongside Gear Expo 2001. The seminar titles, with a description of each seminar, appear below.

Gear Metrology, Oct. 8, presented by Edward Lawson, director of metrology at M&M Precision Systems Corp. This seminar begins with a brief history of gear technology and an overview of gear inspection and types of gearing. It continues with single- and double-flank composite testing, the involute profile, tooth alignment, pitchline runout, and pitch and index errors. Lawson will cover the gear inspection standard, ANSI/AGMA 2000-A88, and alternative testing methods and measurement validity.

The Preliminary Gear Design Thought Process, Oct. 9, presented by Raymond Drago, chief engineer of Drive Systems Technology Inc. and a senior technical fellow of Boeing Co. This course addresses the development of the preliminary gear design and is intended for design, product and process engineers who are new to the industry. It is also

intended for gear users, buyers and specifiers who don't design gears, but who are required to understand the engineering principles of gear design.

Gear Shaping Manufacturing Dynamics, Oct. 9, presented by John Lange, a product manager for Gleason Corp., and Glenn Schlarb, an engineering manager for Gleason Cutting Tools Corp. This seminar covers the basics of the shaping process, including the kinematics of the machine tool, the importance of gear shaping without helical guides, the concepts of shaper cutting tool design and other technical aspects of gear shaping.

Advanced Gear Processing and Manufacturing, Oct. 10, a forum and discussion with seven topics scheduled for presentation. The program contents and participants will include:

- "Finish Hobbing of Hardened Gears," Dennis R. Gimpert, Koepfer America L.L.C.;
- "The Prediction of Worm Gear Contact and Transmission Error Based on Tooth Surface Measurement," Dr. Michael Fish, Holroyd;
- "Fahrenheit 451: Gear Up for Induction Hardening," Daniel J. Williams, Welduction Corp.;
- "Near-Net Forged Gears," Dale Debeljak, Presrite Corp.;
- "Improving Gear Manufacturing Through Better Parts Washer Management," Rick Terrien, Universal Separators Inc.;
- "Shaving: A Successful Gear Finishing Process," Dennis A. Sine, Nachi Machining Technology Co.; and
- "Efficient Hard Gear Finishing Utilizing Non-Dressable Tools," Tom Lang, Kapp Technologies.

Each SME seminar costs \$395 for SME members and \$445 for nonmembers. Program hours are from 8 a.m. to 2 p.m. For information about attending any of the SME seminars, contact Lynn Albertson, senior program developer, by telephone at (313) 271-1500, extension 2131, or by e-mail at albelyn@sme.org.

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Marketing in the Gear Industry

*Do you want to learn how to easily reach your customers?
Do you want your company to be more effective on the Internet?
Find out how at booth #418 at Gear Expo 2001, October 7-10 in Detroit.*

Randall Publishing, Inc. wants to help you develop marketing solutions that achieve your company's goals. As publisher of *Gear Technology*, the only magazine focusing exclusively on the gear industry, and of the websites powertransmission.com™ and *The Gear Industry Home Page*™, we have extensive knowledge of the gear industry marketplace. We'd like to share that knowledge with you at our booth at Gear Expo 2001.

While we'll explain to you the advertising options available with us, we'll also suggest solutions with other companies. Our consultation is a no-pressure, information-only opportunity to learn from the people at the center of the gear industry marketplace.

Marketing Solutions

We help all sorts of gear industry companies reach their target markets every day, including:

- Gear job shops and gear drive manufacturers
- Gear machine tool manufacturers
- Gear cutting tool manufacturers
- Inspection equipment manufacturers
- Workholding manufacturers
- Materials suppliers
- Suppliers of services, such as heat treating, consulting and more.

We can give you tips and secrets that have helped many in our industry reach their target markets. Our experts will walk you through:

- How to spread your message for FREE
- How to reach the buyers who need your products and services
- How to get the most out of your advertising dollar
- The importance of consistency
- How to make the most of your technical expertise
- Planning a long-term strategy
- How to know if your ads are working.

**If you're involved in marketing
decision-making at your company,
visit booth #418.**

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you make at Gear Expo.**

**Also, we'll sign you up for a chance to
win our one-of-a-kind gear clock, which
will be given away at the show!**

