



Gear Inspection

This tour was created as a supplement to an MPT Expo course, providing suggested stops for those who want to learn more about this topic from vendors on the show floor.

Analytical Gear Chart Interpretation

Monday, October 20 | 12:00-4:00 pm

Registration for this course is available at <https://motionpowerexpo.com/education-courses/>

We suggest the following stops:

Digital Way | Booth 841

Troy, MI <http://www.digitalwaygroup.com>

Digital Way is a provider of real-time, in-process, tool condition monitoring (TCM), machine condition monitoring (MCM), and machine crash protection systems. Our products detect cutting-tool wear / breakage / chatter, tooling imbalance, and spindle / cross-slide damage. Our products are also used for adaptive control and metal-cutting process analysis / optimization. When used in gear broaching, grinding, hobbing, honing, and skyving operations, our products can detect process problems such as, improper part clamping, part slippage, workholding runout, and undersize parts. Our products can verify that a grinding wheel has been properly dressed. Our products can help you to maximize tool life, while avoiding tool breakage.

Foerster Instruments, Inc. | Booth 828

Pittsburgh, PA <http://foerstergroup.com>

FOERSTER, a leading manufacturer of nondestructive testing (NDT) equipment, provides Eddy Current technology to detect material discontinuity and imperfections such as cracks, laminations, pores etc. It also enables metal manufacturers to check for material mix-ups and heat treat conditions. The products range from sophisticated integrated in-line Material Handling Test Systems to handheld testing instrumentation for the Automotive Component, Aerospace, and Metal Manufacturing Industry.



Stresstech | Booth 606

Pittsburgh, PA <http://www.stresstech.com>

Stresstech is headquartered in Finland and has offices in Germany (Rennerod) the United States (Pittsburgh) as well as sales and service representatives around the world. Since 1983, Stresstech has been providing non-destructive and destructive testing solutions for process control and quality inspection. The inspection equipment and turn-key solutions serve the automotive, aerospace and other manufacturing industries as well as universities and research institutes.

Index Technologies | Booth 473

Cleveland, OH

<http://www.indextechnologiesinc.com>

Index Technologies Inc. was formed in 1999 to service gear manufacturers' hob sharpening needs. Since our humble beginning with one hob sharpener we have added seven hob sharpeners, four shaper sharpeners, conventional, skiving and a CNC inspection machine, enabling us to have the most rapid turnaround time in the industry: edge prepared, coated and ready for your gear cutting machine. We routinely surpass the specified quality tolerance of the tools we sharpen, and we guarantee our workmanship. Our customers' investment in gear tools is significant. We help our customers maintain that investment to meet or surpass your specified AGMA or DIN tolerance every time we sharpen a tool. We have sharpened thousands of hobs and shaper cutters in the last 20 years, so let our experience be to your advantage.

Nidec | Booth 336

Wixom, MI

<http://www.nidec-machinetoolamerica.com>

Manufacturer of a broad spectrum of machine tools including gear hobbing, shaping, shaving, honing, broaching and grinding machines.

**Instructor's company*

Wenzel America Ltd. | Booth 262

Wixom, MI <http://www.wenzelamerica.com>

WENZEL provides a full line of metrology solutions for gear inspection through its dedicated gear inspection

equipment as well as its CMM-based solutions. Both have the ability to inspect helical, spur, bevel, worm, worm wheel, and synchronization gears, as well as cams, racks, rotors, hobs, shapers, shavers, and broaches. We also have reverse engineering and GDE capabilities.

KAPP Technologies L.P. | Booth 219

Bolder, CO <http://www.kapp-niles.com>

KAPP NILES is a globally operating group of companies with high-quality and economical solutions for finishing gears and profiles. About 1,000 employees represent the innovative strength and expertise of the sustainably managed family company which has grown for over 125 years. The perfect interaction between machine, tool and technology enables the precise machining to a thousandth millimetre and up to a diameter of eight metres. Each system solution is individually optimised for customer requirements and serviced by us throughout its life cycle. Highly accurate measuring equipment complements the comprehensive product range to ensure the required quality.

Dontyne Systems | Booth 213

Washington, Tyne and Wear, UK

<http://dontynesystems.com>

Dontyne Systems offers software and services aimed at the optimum design and manufacture of gear components. Our Gear Production Suite software has been developed as a collection of individual tools proven to deliver improved efficiency, cost savings, and quality control. We can also offer teaching courses and consultancy services. Dontyne has over 150 customers worldwide and various partners for applications ranging from automotive, marine, wind turbines, mining, and motor sport. The modular construction of the software has been designed for maximum flexibility. Our customers find the software useful both as a stand-alone system and as a powerful addition to existing gear design systems. Bespoke integration of in-house IP to run alongside the recognised design and analysis is possible. Development of customer specific functionality embedded in machine tools and measuring equipment has provided a cost effective solution to efficient product development and integration with our design software.

United Tool Supply | Booth 101

Cincinnati, OH <http://www.unite-a-matic.com>

United Tool Supply, located in Cincinnati, OH, is an industry leading gear inspection gauge manufacturing company. United Tool Supply is debuting brand new products at the 2019 Motion, Power and Technology Expo. At the expo they will be debuting their newest runout inspection fixture, the Roll-A-Matic. This product is designed to be an easy to use, shop floor runout fixture that requires minimal operator training and incorporates a flexible design to be used across a variety of parts. In addition to this, United Tool Supply will be

showcasing their Unite-A-Matic. A dimension over ball/pin gauge that has the ability to check minor/major diameter, ability to check even & odd number teeth, pitch diameter of splines, spurs, and helical gears, and inspect tooth thickness of splines for OD & ID applications. Rounding out United Tool Supply's product offering is their shop grade surface finish inspection fixture, the Surf-A-Matic. This fixture incorporates a universal design for multiple part set up with no hand tools required for part change over. The detailed design incorporates housing to protect the stylus, while being able to produce consistent, accurate readings.