



# **EV & Hybrid Technology**

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.

An Overview of EV and Hybrid Vehicle Powertrains

Tuesday, October 21 | 12:00-4:00 pm

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

We suggest the following stops:

# Marposs | Booth 138

Auburn Hills, MI

https://www.marposs.com/eng/

Marposs sets the standard for NVH (Noise, Vibration & Harshness) gear inspection, delivering the precision and speed manufacturers need for quiet, reliable transmissions. Our in-line systems combine Single Flank Transmission Error testing with high-speed NVH analysis to catch defects before they reach the customer. From detecting pitch, profile, and runout issues to pinpointing micro-defects at operational speeds, Marposs ensures every gear meets the strictest noise and vibration targets, on both drive and coast flanks. Smart statistical self-learning adapts to your production, setting optimal pass/fail thresholds and reducing false rejects. Whether for EV edrives or traditional gearboxes, Marposs helps you achieve the perfect balance of performance, quality, and acoustic comfort, keeping your production flowing and your customers satisfied.

### Klingelnberg America | Booth 177

Saline, MI <a href="http://www.klingelnberg.com">http://www.klingelnberg.com</a>

The Klingelnberg group is a world leader in the development, manufacture and sale of machines for bevel gear and cylindrical gear production, measuring centers for gearing and axially symmetrical components as well as customized high-precision gear components. The Company's products are used by customers in automotive, truck, aircraft, agriculture, construction, power tool and marine industries and by a diverse set of customers serving various industrial equipment markets.

# United Gear & Assembly, Inc. | Booth 212

Hudson, WI http://www.ugaco.com

United Gear and Assembly offers a totally integrated gear company. UGA manufactures precision gears and shafts for engines, generators, transmissions and drive trains used by OEM manufacturers world-wide, including custom gear and shaft products designed to meet rigid specifications. UGA produces products that include: parallel axis gears, bevel gears, helical gears, cluster gears, splined shafts, splines, pinions, and sprockets. Heat Treating capabilities include: batch carburizing, continuous carburizing, gas nitriding, carbonitriding, induction hardening, throughhardening, normalizing, stress relieving, tempering, press quench, and a complete metallurgical laboratory. United Gear is IATF 16949 & ISO 9001 certified.

#### ANCA | Booth 265

Wixom, MI http://www.anca.com

The rising popularity of skiving has caused a surge in demand for skiving cutters. Responding to the market, the ANCA GCX Linear brings a complete solution for the manufacturing and sharpening of skiving cutters. Comprehensive design and simulation software plus a suite of technologies: AEMS, MTC, and high-accuracy headstock enable high-precision DIN AA quality cutters to be ground

on the GCX Linear. The onboard analog probe measures the tooth profile and spacing in process, direct path compensations, along with practical closed-loop production software.

# **REM Surface Engineering | Booth 356**

Southington, CT https://www.remchem.com/

REM Surface Engineering, the inventor of the ISF® Process, is a global provider of surface engineering solutions and the world's leader in isotropic superfinishing. REM's ISF Process is the ultraprecision application of our ISF Technology, extensively used in gearing applications including aerospace, electric vehicles, and heavy-axle/off-highway. ISF Surfaces outperform essentially all other surfaces in contact fatigue, scuffing, extreme conditions, break-in, and efficiency testing.

### **DVS Technology America | Booth 359**

Plymouth, MI

### https://www.dvs-technology.com/dvs-group

The DVS TECHNOLOGY GROUP is made up of Germany-based companies focusing on the turning, gear cutting, grinding and gear honing technologies. Besides engineering and manufacturing machine tools as well as grinding and honing tools, DVS operates two production sites where automotive parts are machined in series production exclusively on DVS machines. This adds a high degree of production know-how to the experience of the DVS machine tool and tooling manufacturers. With a unique combination of machining technologies, tooling innovation and production experience for the machining of vehicle powertrain components DVS is one of the leading system suppliers in the industry.

# Delta Gear | Booth 402

Livonia, MI

#### http://www.delta-gear.com/

Providing aerospace and automotive OEM and sub-tier customers with unparalleled gear manufacturing service and satisfaction for decades.

# **Gleason Corporation | Booth 529**

Rochester, NY <a href="http://www.gleason.com">http://www.gleason.com</a>

Gleason is a global leader in gear technology.
Gleason's "Total Gear Solutions" range from gear and transmission design software to the development and production of gear manufacturing machines and related accessories, gear metrology equipment and automation systems. Gleason products are used by customers in the automotive, commercial vehicle, aerospace, agricultural, mining, energy, construction, power tool, marine and many other industrial equipment markets.

### **Reishauer Corporation | Booth 537**

Elgin, IL <a href="http://www.reishauer.com">http://www.reishauer.com</a>

As a leading worldwide supplier of CNC gear grinding machines for workpieces up to 1000 mm in diameter, Reishauer employs approximately 700 engineers, technicians, and administrative staff dedicated to excellence in machine tool manufacturing, diamond or CBN tools, grinding wheels, and clamping fixtures.

### Star SU, LLC | Booth 559

Hoffman Estates, IL http://www.star-su.com

Star SU LLC – part of the Star Cutter family of companies – offers a wide variety of gear cutting machinery, tools and services including: vertical hobbing and chamfering and deburring machines; hob sharpening machines; hobs, milling cutters, shaper cutters and shaving tools; chamfer and deburring tools; gundrills and reamers; form tools; and tool life cycle management services.

### SMT | Booth 733

Hoffman Estates, IL http://www.star-su.com

SMT is a Global CAE software dedicated to providing engineers with the expertise and tools to deliver innovative powertrain technology. MASTA, is a Single Software Solution where you can design, develop and analyse highly optimised transmission, electric machine and electrified powertrain systems within one intuitive interface. Features include durability analysis for gears, bearings, shafts and splines, system NVH analysis and optimisation, advanced loaded tooth contact analysis, multibody dynamics, power loss, motor analysis and more.

### Digital Way | Booth 841

Troy, MI <a href="http://www.digitalwaygroup.com">http://www.digitalwaygroup.com</a>

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.