

Look for the Emerging Technology at MPT Expo 2025

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In just a few weeks, our industry will gather in Detroit for the 2025 Motion + Power Technology Expo (MPT Expo). This flagship event shines a spotlight on gears and their crucial role in motion systems. The show offers unmatched opportunities for in-person networking, learning and exploration with top experts across the gear and bearing industries.

This year, we have designed several activities specifically focused on emerging technologies that could transform—or even disrupt—the way we think about motion and power. Make the most of your time at MPT Expo 2025 and take advantage of these sessions to stay ahead of the curve.

What's Brewing Power Breakfasts

Each morning of the Expo features a targeted discussion led by the Emerging Technology Committees. Tuesday morning, join us for a discussion about the future of robotics. Robotics Committee Chair, Robert Kufner, CEO at Designatronics, will moderate a panel of experts on a discussion of trends in robot mechanisms. We will highlight the trajectory of humanoid robots and discuss the types of gear sets being used in prototypes and initial productions. We will also discuss the impact on subsequent markets like prosthetics and exoskeletons because of this work. On Wednesday, we

will discuss the future of aerospace, space and defense. Noel Mack, CTO at LIFT, will provide his expert knowledge alongside invited members from government and the supply chain. How will the gear and bearing markets be impacted with new plane and drone designs? What demands may OEMs put on the supply chain? And on Thursday, join us for a discussion on the future of the workforce. We will be discussing some of the cutting-edge training for manufacturers, making them ready for artificial intelligence (AI), model-based definition and the digital thread, and more.

Curated Show Floor Tours

Our self-guided curated show floor tours return in 2025—designed around specific gear industry themes to help you connect with the right exhibitors. New in 2025, we will have one staff-led curated tour each day for those interested in learning more about emerging technology. These emerging technology tours will show attendees upcoming trends in gears as they relate to our four committees: 3D Printing, IIoT, Electric Vehicle Technology, and Robotics.

Full-Day Courses

We are offering ten courses at this year's event that range from basics to expert, half-day to two-day courses. Several

of these courses have been updated to reflect emerging technology trends. The electric vehicle one-day course will look at concept, development, design and initial analysis of EV transaxle gearboxes. Instructor Mark McVea will explore common EV transaxle architectures and discuss the key difference between EV transaxles and traditional transmissions with a focus on gear noise. And instructors of the materials course, a joint effort between AGMA and ASM, will make sure to include new information on materials in the additive space.

Fall Technical Meeting (FTM)

The Fall Technical Meeting is a conference dedicated to high-level, gear-industry innovation. Renowned for its rigor and technical depth, FTM showcases over 30 peer-reviewed papers that push the boundaries of emerging technologies. It is the original source for emerging technology in gearing. One session to note is Technical Session 2, which specifically has papers on the topics of electric vehicles and emerging technologies.

I look forward to seeing you at the 2025 Motion + Power Technology Expo in October. Please come seek me out and let's discuss emerging technology in our industry!

