



# ROBOTICS AND AUTOMATION TOUR

Robots are proving vital to overcoming some of manufacturing's top challenges. They are aiding with issues around workforce challenges, skills shortage, and productivity. They are also showing to be more affordable than ever for small- and medium-sized manufacturers.

This tour takes you to one of the top robot suppliers in manufacturing today, FANUC. And you will stop by two robot integration companies who have specific experience working with gear manufacturers. Finally, we take you to see a few companies who have worked to provide automation to the gear industry. There will be different examples of robots in action in cells on the show floor. These final booths should serve as examples of many more vendors on the show floor that have incorporated robot technology into their products and services.

#### STARTING POINT



AGMA Booth 3132 https://www.agma.org/

The American Gear Manufacturers Association

(AGMA) is an association of more than 450 companies, consultants, and academicians with direct interest in the design, manufacture, and application of gears and flexible couplings. AGMA is also the owner of Motion + Power Technology Expo. Founded in 1916, AGMA conducts programs for and provides services to the gear industry and its customers. AGMA is accredited by the American National Standards Institute to write all U.S. standards on gearing.

The AGMA Foundation is the charitable arm of AGMA and provides gear industry scholarships, workforce & education support, and emerging technology programming. Consider a donation at www.agmafoundation.org.

### STOP 1

#### **Foerster Instruments Inc**

Booth 2322

Pittsburgh, PA | http://foerstergroup.com

FOERSTER-NDT Solutions for testing of Metal Components

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 inline Material Handling Test Systems to handheld testing instrumentation for the Automotive Component, Aerospace, and Metal Manufacturing Industry.

#### STOP 2

# **Cleveland Deburring Machine Company**Booth 3424

Cleveland, OH | http://www.cdmcmachine.com

Welcome to Cleveland Deburring Machine Company, Inc.

We're not jacks of all trades. We are a master of one. We're not a machining company or an automation company that happens to offer deburring services. We're a deburring company first.

At CDMC, we offer proven expertise across a large array of methods for deburring and metal finishing from brushing and grinding to abrasives and hard tools. And with capabilities including automation and partswashing to add to our deburring machines, our team is ready to support you and your specific goals.

#### STOP 3

#### **Creative Automation**

**Booth 3617** 

Whitmore Lake, MI | http://www.cautomation.com

See the latest in Robotic Automation

Creative Automation is a system integrator for all types of automation. We provide custom-engineered solutions for industry. Whether it's a single machine or multiple machines, Creative Automation can supply all your automation requirements including conveyors, Robots, Gantries, pick and place units, and gear handling systems. A Creative Automation solution will be engineered to meet your needs. We are a RIA Certified Robotic Integrator as well as ISO9001:2015 certified.

We have a line of standard Robotic Machine tending systems called the Boxy Autololader.

#### STOP 4

#### **Helios Gear Products**

**Booth 3609** 

South Elgin, IL | http://heliosgearproducts.com

Helios Gear Products is the North American factory sales and technical support organization for global gear machine and tool manufacturers. Gear manufacturers work with Helios for industry-leading service and support backed by a dedicated team of engineers to ensure each application is profitably productive. Manufacturers in the automotive, aerospace, construction, energy, and medical markets rely on Helios manufacturing solutions every day.

As Helios grows beyond our Koepfer America legacy and the 150-year reputation of Koepfer machine tools, our customers are delighted with full access to expanding gear manufacturing capabilities. This includes Helios Hera gear hobbing machines for parts under an inch to over 500 mm (19.685") diameter, Neo power skiving (NEOPS) machines, and pre-owned Koepfer hobbing equipment. Our machines enable the profitable production of spur and helical gears, internal and external gears, splines, worms, straight bevels, rotors, long shafts, and more.

## STOP 5

## **FANUC America Corporation** Booth 3116

Rochester Hills, MI | http://www.fanucamerica.com

FANUC is the Leading Supplier of Automation Solutions

As the leading supplier of robots, CNCs and factory automation, FANUC is committed to helping companies find solutions. From small shops to large assembly operations, manufacturers rely on FANUC automation to help improve productivity, increase quality, maximize profits and maintain a competitive edge. We also work with schools and industry to develop certified curriculums centered on robotics and automation training, helping prepare students for high-tech careers in advanced manufacturing. In addition, we are dedicated to "Service First", which offers our customers parts and support for the life of their FANUC products.

With over 24 million products installed worldwide, FANUC is the most familiar brand of manufacturing automation.

### STOP 6

#### **EMAG LLC** Booth 2813

Farmington Hills, MI | <a href="http://www.emag.com">http://www.emag.com</a>

The EMAG Group is one of the few suppliers of manufacturing systems that **cover the whole process chain**, from soft to hard machining. Access to a wide range of technologies (turning, drilling, milling, gear cutting, grinding, laser welding, ECM deburring, PECM machining, induction hardening and automations) allows EMAG to implement complete process chains not only for the manufacture of gearbox, engine and chassis components but also of components for the non-automotive sector.

A company steeped in tradition with global headquarters in Salach, Germany, the EMAG Group capitalizes on the collective knowledge of its technology companies to offer modular and custom innovative manufacturing systems with world-class precision. Our North American plant is located in Farmington Hills, Michigan, providing sales, service, spare parts and training for customers in the United States, Canada and Mexico.

#### STOP 7

# **Liebherr Gear and Automation Technologies**Booth 2800

Saline, MI | http://www.leibherr.com

Gear Cutting machines, automation systems and cutting tools.

Liebherr Gear and Automation Technologies, Inc. offers a complete program of gear technology and automation solutions. Liebherr manufacturing machines include gear hobbing, shaping, skiving, chamfering, and gear grinding machines, as well as gear metrology solutions. These machines feature the LHGearTec control system, an intuitive interface that streamlines machine operation and efficiency. In addition, Liebherr manufactures gear cutting tools and clamping fixtures, to provide comprehensive application support in gear machining to the North American customer base. Liebherr automation systems offer a wide range of solutions that are cost-effective, user-friendly, highquality, and offer the flexibility to expand retrospectively. As a system supplier, Liebherr makes use of our broad product portfolio consisting of gantries, robots cells, pallet handling systems, conveyor systems, 3-D vision software technology for random part picking, and innovative new technologies to design the best solution for our customer's automation needs.

"Automation is now more affordable for the small- and medium-sized manufacturing plants. More and more we are seeing solutions for low volume, high mix facilities.

Let me introduce you to some companies on our show floor."

Mary Ellen Doran AGMA Director, Emerging Technology

Mary Ellen curated the tours and will be available for personal tours or questions during your visit to MPT.

