

# Automate 2017

## Highlights Solution Providers and Integrators

Matthew Jaster, Senior Editor

**Automate 2017 (April 3–6) will showcase the full spectrum of automation technologies and solutions, from traditional industrial applications to cutting edge new technologies.** Live show demonstrations will inform the industry on the successful integration of automation, robotics and machine vision. The rest of the show features the latest automation, robotic, vision and motion control technologies and systems on display from leading global suppliers. A comprehensive educational conference accompanies the Automate show. Featuring a broad array of classes from beginner to advanced skill levels, the conference offers something for all attendees — they can take one class or four full days of training. Classes are taught by experienced industry professionals who understand the industry challenges attendees face. ProMat 2017 is co-located with Automate and provides attendees access to the latest material handling and logistics equipment and technologies.

### Conference Highlights

Here's a quick rundown of some of the educational opportunities available at the Automate Conference. The conference includes everything from a basic understanding of automation to more advanced courses including the 48<sup>th</sup> Annual International Symposium on Robotics.

#### Monday April 3

- The Fundamentals of Machine Vision (8:00 am–12:00 pm)
- The Trend toward Flexible Manufacturing (9:00 am–11:00 am)
- Advances in 3D Vision (3:00 pm–5:00 pm)

#### Tuesday April 4

- Basic Machine Design and the Physics of Motion (9:00 am–10:00 am)
- Mechanical Motion Control Components and Subsystems (10:00 am–11:00 am)
- Positioner Selection and Motor Sizing (3:00 pm–4:00 pm)

#### Wednesday April 5

- Digital Servo Amplifier Basics (9:00 am–10:00 am)
- Advances in Motion Control Technologies (9:00 am–11:00 am)
- Overcoming Food Processing and Packaging Challenges (3:00 pm–5:00 pm)

### Booth Previews

Here's a quick rundown of some of the products and technologies attendees should check out during the show.

#### ATI Industrial Automation (Booth #N-1621)

ATI will feature several large robotic demonstrations in their exhibit (booth #N-1621) in addition to the following new products:

The new QC-46 Tool Changer is extremely lightweight—only 6.5 lbs (2.98 kg)—and has a very low stack height of 2.61 inches (66.3 mm). It utilizes the same proven Locking Mechanism as the QC-40 Tool Changer, and handles payloads up to 110 lbs (50 kg). The QC-46 can accommodate up to seven separate utility modules to handle a large variety of signals, fluid, air, and other requirements. The QC-46 also features optional internal Lock/Unlock sensing and direct mount to robots with a 100 mm ISO pattern.

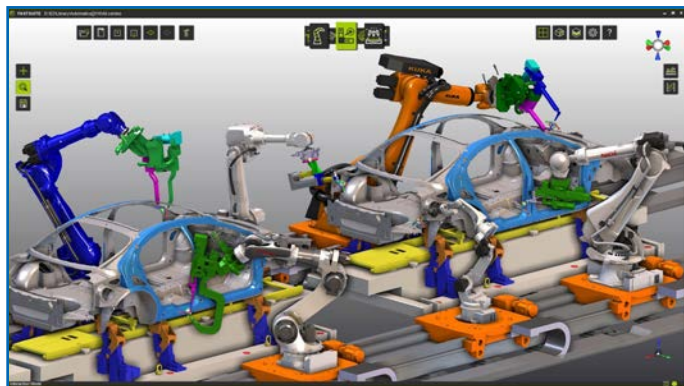


ATI's Modular Tool Stands maximize flexibility with ATI's wide range of Robotic Tool Changer models. The modular system concept allows you to "build your own" tool storage rack based on the number of tools, positioning, orientation, and mounting arrangements required. ATI will have a large variety of Tool Stand options on display.

The Axia80 Force/Torque Sensor is a lower-cost sensing solution that maintains the quality and accuracy found in all of ATI's Force/Torque Sensor products. All the electronics are built into the transducer body which keeps the cost down and footprint smaller, while excelling in accuracy, resolution, and robustness. The Axia80 will be available in Ethernet and EtherCAT versions and will feature a high signal-to-noise ratio and high overload protection, between five and 20 times over the sensing range. ([www.ati-ia.com](http://www.ati-ia.com))

### CENIT (Booth #2025)

The trend of highly individualized products leads to many unique variables, low production batches, and the need for flexible automation systems. To support this steady evolution, a next generation of Digital Factory tools is required. At Automate 2017, the software specialist CENIT is presenting a powerful and efficient solution: the high-performance Digital Factory software — *FASTSUITE Edition 2*.



Digital Factory methods including virtual process planning, offline-programming, simulation, and optimization will become mandatory to enable new technologies and to increase the production efficiency. *FASTSUITE Edition 2* is a stand-alone simulation platform that supports production with an offering of best-in-class software technology. The software addresses the entire process — from engineering to the virtual start of production. With this program, users can create, program and operate robots, machines, and production systems for specific technologies based on accurate, high performance simulations.

All of the technologies and functions interact seamlessly and complement each other in a single, innovative user interface with a standardized data model. This ensures an efficient workflow with full process control, while preventing data redundancy or the loss of information. The scope of functions includes process-driven technology and control packages to provide offline programming even for sophisticated applications and technologies. With these basic features, users can get started quickly, and conveniently draw on proven solutions. CAD data is imported using standard interfaces like STEP or JT, or via direct interfaces to NX, CATIA, SolidWorks, etc. ([www.cenit.com](http://www.cenit.com))

### R+W Coupling Technology (Booth #968)

R+W will be demonstrating the benefits of using mechanical overload protection in a high-performance servo drive application. The SK and SL series torque limiters can disengage the driveline within 2-4 milliseconds of a torque spike resulting from unintended blockage and overload, potentially preventing critical damage to expensive equipment. The latter, SL series, features a special compact and low inertia design for cutting edge automation requirements. R+W safety couplings come in both direct (shaft-to-shaft) and indirect (shaft-to-pulley) mounting options to be used in almost any



application where mechanical overloads may occur. Much of the SL series is available in stock in Illinois to reduce delivery from several weeks to just a few days in case of an emergency requirement. Stop by the R+W booth to find out more about modern torque limiter technology and how it might be useful for your applications. ([www.rw-america.com](http://www.rw-america.com))

### Promat 2017

The latest manufacturing, distribution and supply chain equipment and systems will be on display at Promat (co-located with Automate 2017). More than 850 solution providers will discuss their latest supply chain innovations and help attendees build business partnerships with suppliers from around the world. More than 100 show floor seminars will be available including town hall style sessions on autonomous vehicles and sustainable facility solutions. Key exhibitors include Epicor, Regal Power Transmission Solutions, Aerocom, Alba Manufacturing and more.

([www.automateshow.com](http://www.automateshow.com)) **PTE**

