



# End-Effector eNews

From ATI Industrial Automation

SUMMER/FALL 2014

## FORCE SHOES OUTFITTED WITH ATI F/T SENSORS LAUNCHED TO THE ISS



ATI Industrial Automation's Six-Axis Force/Torque Sensors were recently launched into outer space on the Soyuz Rocket Mission to the International Space Station. ATI Force/Torque Sensors were chosen to be used in the production of the Xsens ForceShoe which is a high-fidelity, wearable research tool. This wearable technology was developed by the University of Twente and Xsens, a technology leading innovator in 3D motion tracking technology and products. The ForceShoe device, using ATI Force/Torque Sensors, collects data for studying the loads or force produced by crew members during exercise on the space station. [Read More >](#)

## Featured Products



### Lateral and Pivoting Compliance Devices

ATI Industrial Automation has developed two new series of compensators (patents pending) that allow compliance in multiple directions. These unique devices allow pieces to be gripped or routed reliably even if the workpiece is severely misaligned. Both of these series are designed for high endurance and high repeatability, and have robust guidance allowing for high moment loads in a compact work envelope. [Read More >](#)



### QC-160 Robotic Tool Changer

The QC-160 Robotic Tool Changer is a new model that has a high moment capacity in a lightweight and compact package. The QC-160 utilizes the same proven Locking Mechanism as the QC-200 Series Tool Changers – exceeding 200 kg robot load specifications. The new Tool Changer also features internal Lock/Unlock sensing and (5) 3/8 NPT and (4) 1/2 NPT pass-through air connections. [Read More >](#)

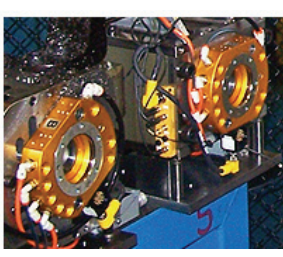
## ATI'S 8th ANNUAL MICHIGAN TECHNOLOGY FAIR, THURSDAY, AUGUST 21st

Join ATI Industrial Automation for their 8th Annual Technology Fair to learn more about the many new robotic end-effector products that have been developed over the last year. A variety of topics will be covered, including guest presentations by: A3, Apex Tool Group, Battenberg, KUKA Robotics, KUKA Systems, Stanley Engineered Fastening, and Valiant International.



## MANUFACTURING SUCCESS WITH TOOL CHANGERS

Engineered Machined Products (EMP), based in Escanaba, Michigan, is a leading producer of machined components and energy-saving systems. Like most manufacturers, EMP felt the difficult blows of the recession in 2009.



Even after implementing robots and automation, EMP faced an onslaught of competition from low-cost labor markets. Brian Larche, EMP owner, and his manufacturing team in Escanaba were able to adapt the company's CNC and automation equipment to meet new customer needs. This proved to be the key in turning things around. [Read More >](#)



### Titanium Force/Torque Sensors

ATI has expanded their line of Titanium Multi-Axis Force/Torque Sensors. Typically used for measurements in highly magnetic environments, the Nano17Ti, Mini27Ti, and Mini45Ti are now available in non-ferrous, grade 5 titanium. Despite their small size, these sensors are extremely durable with maximum allowable single-axis overload values that are 4.9 to 23 times rated capacities depending on model and calibration. [Read More >](#)

## NEW PRODUCTS AND SOLUTIONS AT THE IMTS 2014 SHOW

ATI Industrial Automation will be exhibiting at the upcoming International Manufacturing Technology Show (IMTS) on September 8-13, 2014, in Chicago, IL at McCormick Place, North Hall, Booth #N-6429. ATI will display a variety of live robotic demonstrations and new products including, new Tool Changers models and Manual Utility Couplers. [Read More >](#)



## Featured Videos



### Engineered Excellence - The ATI Story

This company video explains ATI Industrial Automation's business philosophy and company culture. [View >](#)

## NEW MOBILE APP FOR VIEWING CATALOGS AND MANUALS

ATI Industrial Automation has released a new iPhone and iPad application that makes it easy to view ATI's latest product catalogs and manuals. The ATI Expert App, available for free at the App Store, lets you browse ATI's entire library of documents – over 580 – on your Apple mobile device, using an intuitive navigation system. [Read More >](#)



### Robotic Tool Changers Enable Quick and Automatic Exchange of Wax Room Tooling

Mounted on the wrist of the robot, ATI QC-20 Robotic Tool Changers enable the robot to quickly exchange wax room end-effectors to perform multiple operations. [View >](#)

## PATENT AWARDED TO ATI FOR ARC PREVENTION TECHNOLOGY

ATI Industrial Automation was recently awarded a patent for their Arc Prevention technology which completely eliminates the damaging arcing effect that can occur when passing power through a tool changer. When passing power to inductive/capacitive loads through a tool changer, power should be turned off during the tool change to prevent arcing. Arcing can occur when high inrush-current loads on the tool side cause a small arc to form between the pin block contacts. Over time, arcing can cause damage to the power contacts. ATI's Patented Arc Prevention technology prevents arcing and therefore extends the life of pin block contacts. [Read More >](#)



### QC-001 Micro Tool Changer

The QC-001 Micro Tool Changer features an extremely compact and lightweight design for high-speed "spider" or delta robots. This new Tool Changer enhances the flexibility of these robots by enabling them to switch end-effectors automatically. Multiple assembly, dispensing, sorting, and material handling operations can be performed by one robot, greatly increasing productivity, while reducing downtime for change-overs. [View >](#)

## UPCOMING EVENTS

ATI exhibits at a variety of industry shows and conferences. Our schedule is listed below. Contact Valerie Van Deusen at [Valerie.VanDeusen@ati-ia.com](mailto:Valerie.VanDeusen@ati-ia.com) if you would like a FREE ticket (subject to availability) to any upcoming shows.

<a href="#">Reabilitação 2014</a>	August 13-15, 2014	Anhembi Conventions Palace, São Paulo, Brazil ( <b>Booth #A-21</b> )
<a href="#">ATI's 8th Annual Technology Fair</a>	August 21, 2014	ATI Michigan Office, Orion Township, MI
<a href="#">RIA Webinar - Robotic Assembly Techniques - Intermediate</a>	August 28, 2014	Internet Noon-1pm EDT
<a href="#">IMTS 2014</a>	September 8-13, 2014	McCormick Place, Chicago, IL ( <b>Booth #N-3429</b> )
<a href="#">RIA Webinar - Robot End Effectors - Advanced</a>	September 11, 2014	Internet Noon-1pm EDT
<a href="#">International Conference on Intelligent Robots and Systems</a>	September 14-18, 2014	The Palmer House Hilton, Chicago, IL ( <b>Booth #104</b> )
<a href="#">RIA Webinar - Robotic Welding - Intermediate</a>	September 25, 2014	Internet Noon-1pm EDT
<a href="#">International Collaborative Robots Workshop</a>	September 30, 2014	San Jose Convention Center, San Jose, CA
<a href="#">National Robot Safety Conference 2014</a>	October 14-16, 2014	Sheraton, Ann Arbor, MI
<a href="#">AWS Sheet Metal Welding Conference XVI</a>	October 22-24, 2014	VisTaTech Center, Livonia, MI
<a href="#">The Assembly Show</a>	October 28-30, 2014	Donald E. Stephens Convention Center, Rosemont, IL ( <b>Booth #433</b> )
<a href="#">Pack Expo 2014</a>	November 2-5, 2014	McCormick Place, Chicago, IL ( <b>Booth #6115</b> )
<a href="#">Fabtech 2014</a>	November 11-13, 2014	Georgia World Congress Center, Atlanta, GA ( <b>Booth #C1650</b> )
<a href="#">A3 Business Forum</a>	January 21-23, 2015	Disney's Yacht Club Resort, Orlando, FL
<a href="#">ATX West 2014</a>	February 10-12, 2015	Anaheim Convention Center, Anaheim, CA ( <b>Booth #4215</b> )
<a href="#">Automate 2015</a>	March 23-26, 2015	McCormick Place, Chicago, IL ( <b>Booth #640</b> )



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