

# On the Move with Circle Gear

PERSONNEL CHANGES AND EXPANSION HIGHLIGHT CICERO, ILLINOIS GEAR MANUFACTURER

**Michael McKernin** was recently appointed president of Circle Gear and Machine Company in Cicero, Illinois. He follows in the footsteps of Albert Knez Sr. the company's current CEO and former president of over 30 years. McKernin has held various positions within the company across engineering and sales disciplines during his 25+ years.

McKernin's efforts have been recognized by Charlotte Knez Schmidt and Albert Knez Jr, third generation members of the founding family and current company executives. "Mike has certainly been busy in his new position. Since his appointment, we have relocated our Quality Reducer Division, re-tooled our manufacturing capability and purchased the building directly adjacent to the main works, increasing our total manufacturing space to over 121,000 square feet" said Mrs. Schmidt.

"Acquiring the 77,000 square foot building located next door to Circle Gear earlier this year, allowed us to better utilize manufacturing and engineering resources, while improving overall service to our customer base. Quality Reducer Service (QRS) formerly of LaGrange, Illinois, moved to the Cicero location in March of 2014. QRS and Circle Gear will now be together under one roof," said McKernin.

QRS specializes in the inspection, overhaul and rebuilding of industrial gearboxes. They have long been supported by the manufacturing and engineering expertise of Circle Gear. In addition to QRS, the expanded facility will house two recent machine purchases, a Gleason Model 463 with aircraft quality hypoid/spiral bevel gear tooth capabilities and the Luren LFG-8040 vertical profile gear grinder.

"Much of our sustained growth over the past two years has been in spiral bevel/hypoid product line," McKernin added. "Bevel gear tooth grinding is a logical extension of that product line."

"The addition of **Paul Campion** as general manager of operations opened the door to significant growth in our bevel department. Paul's reputation and expertise are well known in the gear industry. His leadership and 30+ years of experience have been catalysts for growth not only in bevels but across the full range of our product offering," stated McKernin.

McKernin also noted that the versatility, increased produc-



tion and consistent quality achieved from the new Luren Tooth Grinder were cause to obsolete other machines. "The timing couldn't have been better," McKernin said, "given our recent growth, this machine has allowed Circle Gear to re-map our manufacturing footprint and reclaim much needed floor space, while helping to expand throughput in our plant."

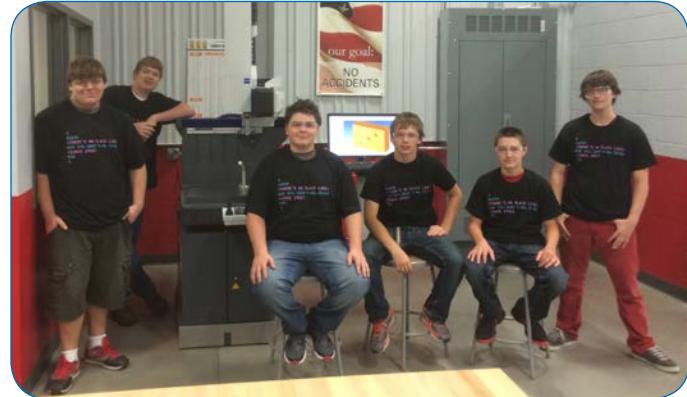
A key component for McKernin is to make these changes as seamless as possible for their customers. "The cornerstone of our business model has always included shortened lead-times and breakdown service. The productivity gains and improved workflow from our increased machine capacity and floor space have allowed us to keep customers happy and coming back for more," McKernin said.

Circle Gear, a family owned and operated company since 1951, is an ISO 9001:2008 registered company and a proud member of AGMA ([www.circlegear.com](http://www.circlegear.com)).

## ITAMCO

DONATES CMM TO PLYMOUTH HIGH SCHOOL

ITAMCO (Indiana Technology and Manufacturing Companies) has donated a Zeiss Coordinate Measuring Machine (CMM) to the Precision Tool Manufacturing Training Program for high school students. The donation was announced at IMTS 2014. The new machine is evidence of ITAMCO's continuing support for the program that Mark Neidig, purchasing manager at ITAMCO, proposed to the Plymouth School Corporation superintendent in 2013.



The new machine will be added to the inventory of precision machining tools housed in the ITAMCO Manufacturing Center on the Plymouth High School's campus in north central Indiana. In addition to ITAMCO's \$100,000 initial donation and ongoing technical assistance, the North Central Area Vocational Cooperative (NCAVC) and Ivy Tech are active contributors. NCAVC contributed funds to purchase equipment and the program's trainer is an Ivy Tech employee. Students receive high school credits and Ivy Tech college credits.

ITAMCO provides open gearing and precision machining services and, like many manufacturers, needs highly skilled employees to operate their technologically advanced CNC equipment. Neidig said that he initiated the program because the ITAMCO team wants to encourage high school

students to enter rewarding careers in manufacturing. "We need to keep the USA at the forefront of innovative manufacturing, but we obviously have selfish motivations as well. We need skilled workers in our own facilities," said Neidig.

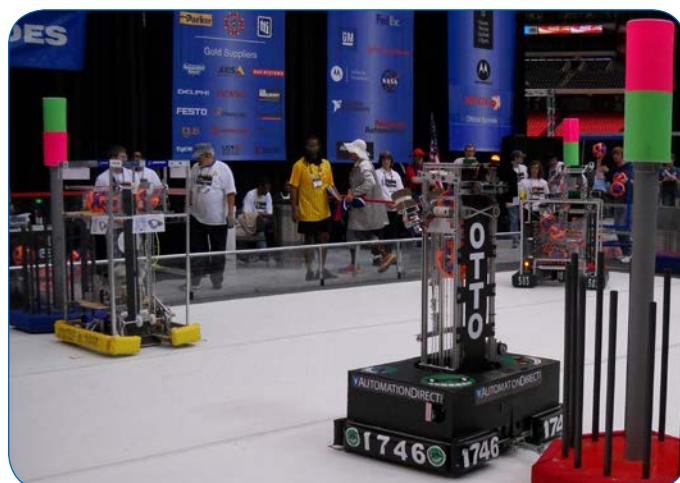
The ITAMCO staff donated a Zeiss DuraMax CMM because it's a world-class machine like the Zeiss CMM machines they use on their own shop floor. The DuraMax replaces the limitations of manual measuring tools with CNC accuracy and flexibility. "Our facility is better equipped than a typical machine shop and we want participants in the training program to be prepared to work on a plant floor like ours," said Neidig. Zeiss generously discounted the price of the machine, contributed 12 educational licenses for their *Calypso* software for the DuraMax, and provided training for the manufacturing center's instructor. The *Calypso* software enables users to create a measuring plan without programming code or text editing.

After only one year of operation, the training program has success stories. Thirteen students have taken Precision Machining I and four were seniors. Three of these seniors are now working at ITAMCO after graduation and one of the ITAMCO employees is continuing his education at Ivy Tech. The fourth student is also working for a local manufacturer. "The companies were pleased with our students' training because they were prepared to work on the shop floor," said Scott Kaser, the instructor for the Precision Tool Manufacturing Training Program and a certified CNC Machinist. "I was just like these kids. I didn't want to go to college but I wanted a good paying job. I like working with them and I enjoy our partnerships with local companies that want to hire them," he added.

## AutomationDirect

### NAMED STEM FINALIST

The Technology Association of Georgia (TAG), the state's leading association dedicated to the promotion and economic advancement of Georgia's technology industry, recently announced that AutomationDirect has been named as a Finalist in the Corporate Outreach category for the 2014 STEM Education Awards.



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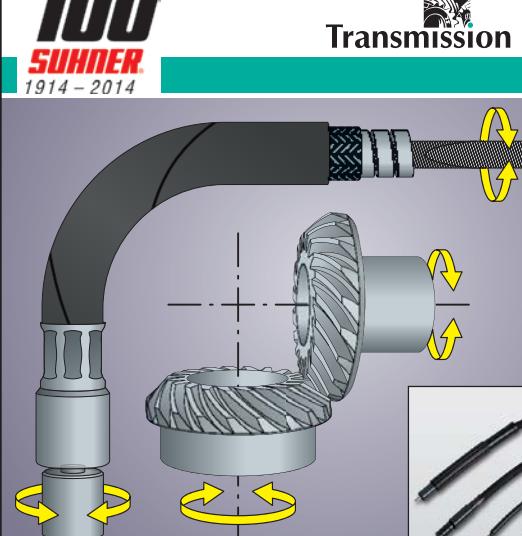
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The Technology Association of Georgia's 3rd STEM Education Awards recognizes schools, programs, and companies for outstanding efforts and achievements in supporting and promoting STEM (Science, Technology, Engineering and Math) Education in Georgia.

For the past nine years, AutomationDirect has funded local competition robotics teams in Forsyth County and surrounding school systems (the "Forsyth Alliance"). Funding is primarily used to provide exciting STEM activities to all students in Forsyth County by ensuring there is at least one competition robotics team in every school and tournaments to compete in. Some schools now have over a dozen teams in multiple programs. Forsyth Alliance teams participate in local, state, national, and world competitions, including FIRST Lego League, FIRST Robotics, VEX, VEX IQ, BEST, Sea Perch and MATE.

"We have found there is no better way to get a young mind excited about STEM than to get them involved in a competition robotics program," says Rick Folea, senior training developer at AutomationDirect. "The Alliance now supports over 100 teams in Forsyth County. The excitement of competition drives their desire to learn in the classroom." The rapid growth of this program and enrollment in STEM programs in the schools and creation of STEM academies in the schools is a testament to the incredible results of this initiative."

"It is exciting to see the progress we are making with STEM education in Georgia. The increase in nominations each year and the quality of the nominations made it difficult for our judges," said Michael Robertson, executive director of TAG Education Collaborative. "Congratulations to the Finalists! Your work engaging these students in STEM will benefit the students you touch for years to come with challenging and exciting careers."

This year's finalists were chosen in eight different categories: elementary school, middle school, high school, post-secondary outreach, extracurricular program, STEM certified School Outreach, Corporate Outreach, Best STEM Day Activity.

Winners in each category were officially honored at The 3rd Annual STEM Education Awards event held on September 26th at the Savannah International Trade and Convention Center in Savannah, Georgia. The event was presented by TAG, the TAG Education Collaborative (TAG-Ed), a non-profit 501c3 dedicated to advancing STEM education in Georgia, and TAG Savannah. "STEM occupations will increase in Georgia by more than 22,000 during the current decade," said Tino Mantella, president & CEO of TAG. "The finalists of this year's STEM Education Awards are helping to prepare the tech-ready workforce needed to fill these jobs and we applaud them for standing out as leaders in Georgia's educational community."

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# ABB

## COMPLETES CONSTRUCTION AND RENOVATION IN WISCONSIN

The cutting of ribbons at both ABB's new office facility on Discovery Parkway in Wauwatosa, Wisconsin, and at the office/manufacturing site on Glendale Ave. in New Berlin, Wisconsin on Monday, August 25, marked completion of the buildings; construction and renovation of the sites began in April of 2013, and nearly all of the 725 employees that work at the ABB Southeastern Wisconsin sites were on hand to mark the occasion. "The business story of the multiple divisions represented at these sites is remarkable," noted Greg Scheu,



region manager, NAM, in greeting employees. "Since 2001-2002, ABB has grown, here, to four times its size. This new office site and the complete renovation of the manufacturing site are a great statement about how the teams here work, of who you are - and how you are helping customers succeed. These buildings mark the beginning of the next chapter." He noted that the new site at Discovery Parkway also "lifts the ABB brand image visibly in a town of fierce competitors."

The new, white, three-story building at the Discovery site features large, lit ABB logos on all four sides, and sits on the highest promontory in Wauwatosa, noted Aaron Aleithe, the general manager and vice president of Drives and Controls, who was the master of ceremonies and profiled significant milestones achieved as the building construction/re-construction were underway. "We know that approximately 60,000 travelers pass the building daily on I-45, bringing a lot of recognition to our brand."

### Incredible Safety Achievements

Huntzinger, the general contractor who built the new site, logged 50,000 hours of construction with zero lost-time accidents, according to Aleithe. Meantime, at the manufacturing site, employees built more than 135,000 drives throughout the renovation, achieved a 98 percent on-time delivery record, without any accidents. "It's a testament to your work and dedication," Ron Tucker, DM division manager, NAM, told attendees, "and I congratulate you on this achievement."



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**Entrance of Light**

At both facilities, there is a generous wrap of fenestration around the buildings that allows sunlight to reach the center of interior spaces. "The days of only the offices and rooms near the windows receiving light are gone," said Aleithe. All the lighting also is controlled via sensors that reduce or turn off the interior lighting, as more sunlight enters the spaces.

The building at Discovery Parkway is Silver LEED certified, and incorporates ABB drives and controls throughout the HVAC system. Unique acoustic tile also creates a quiet work environment for personnel in their cube spaces, while offices at the interior of the building feature sliding doors that close for work sessions and conversations. Tiled pavers on the exterior of the building allow rainwater to be collected and sent to reservoirs that support wildlife throughout Innovation Campus. The Campus is affiliated with the University of Wisconsin Milwaukee, which also has a presence at the 90-acre site via a business accelerator, and future businesses yet to be announced. ABB and the engineering and business schools have plans to work together, as developments at the new campus continues to get underway.

At the manufacturing site on Glendale Blvd., the renovation included expansion of capacity on the manufacturing floor, the addition of new offices, conference rooms, work spaces, and large expansions of the training rooms and café. ABB engineers also designed a state-of-the-art Class 100 Clean Operating HVAC Room that makes it easy for application engineers to showcase the progressive HVAC build-

ing systems that ABB automation solutions and experts help design for end users. "We have a \$120 billion opportunity in this market," noted Scheu; "our future is very bright."

**Collaborative Space**

Captains, co-captains and employee volunteers from the Employee and Customer Teams also were honored, as part of the events. The teams worked for nearly two years to identify critical needs and wants of customers and employees utilizing the new/renovated sites. A significant achievement of the teams includes Collaborative Work Spaces placed throughout the buildings, where employees can gather at any time to discuss customer and production needs, and make decisions as rapidly as possible. "We want employees to work cohesively, share what they know, unhook from their offices, and work in the cafes and shared spaces," said Aleithe. "We know there is strength in teamwork, and the collaborative spaces make achieving that easier."

**SPI and ToolingU-SME****LAUNCH PLASTICSU ONLINE TRAINING**

SPI: The Plastics Industry Trade Association and Tooling U-SME, a leader in providing workforce development and training to the manufacturing industry, recently announced the launch of a new online training program aimed at closing the manufacturing skills gap in the plastics industry. Administered by Tooling U-SME, PlasticsU will serve the plastics

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industry by providing formal online training tailored specifically for the industry's challenges and needs.

"Our industry has some of the best and brightest workers, operating top-of-the-line equipment and technology," said SPI President and CEO William R. Carteaux. "Unfortunately, many of the technological advancements made recently are being held back by a growing manufacturing skills gap, which is why SPI partnered with Tooling U-SME to launch PlasticsU."

"The plastics industry will not realize its full capacity for growth and production unless companies take an active approach to workforce development. PlasticsU offers these companies flexibility and convenience to make this process easy."

As recent as 2013, a vast majority of U.S. manufacturing companies reported being challenged by a moderate shortage of qualified workers for skilled production, as reported by SME. Volume alone is no longer the sole solution to increased productivity. Highly technical and specialized skills are required not only to meet increased demand, but to maintain growth into the future.

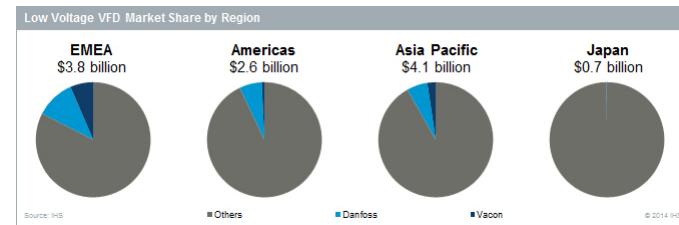
"By instituting a training program, companies can ensure they remain competitive today and into the future," said Managing Director of Workforce and Education at SME, Jeannine Kunz. "Creating a well-trained workforce can help improve quality, cycle time, communications, reliability and safety, while reducing costs and downtime/rework."

Because SPI represents and supports such a wide range of the companies throughout the entire plastics industry, it partnered with Tooling U-SME to develop PlasticsU and

provide a customized selection of courses and programs for areas specific to as many stakeholders as possible. With levels ranging from a basic introduction to the most advanced studies, courses include Interpreting Blueprints; Creating a Milling Program; Principles of Injection Molding; Measuring System Analysis; Rigging Inspection and Safety; and CNC Controls: GE Fanuc, Haas and Mazak.

## Danfoss to Acquire Vacon

Denmark's Danfoss A/S has bid \$1.34 billion for the acquisition of Finland's Vacon Oy, which would result in the union of two of the ten largest variable frequency drive suppliers



globally. According to IHS, the combined low voltage drive revenue from the two companies represent over 10% of the global market value; this is slightly less than the estimated market shares for ABB and Siemens, the two largest suppliers of low voltage drives globally.

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