

# Forest City Gear

## ADDS CONTINUOUS GENERATING GRINDING CAPABILITY FOR HIGH VOLUME PRODUCTION

Forest City Gear has expanded its high volume gear production capabilities with the addition of a Reishauer RZ 160 Gear Grinding Machine and high-speed load/unload automation. The system is part of a new 8,500 sq. ft. facility, located in close proximity to Forest City Gear's main plant, dedicated to the high volume production of eight different gears for a robotics application.

The new Reishauer offers a highly productive, and extremely accurate, continuous generating grinding process, as well as dual workspindles to further increase productivity by enabling workpiece setup, and synchronization, on the idle workspindle while simultaneously machining on the other spindle. As a result, Forest City Gear has added significantly to its capacity for hard finishing gears in volumes much higher than what was possible before, and with exceptional quality, according to Forest City Gear Production Manager Jared Lyford. "Previously, we were using our hobbers to perform the finishing operation after heat treat using the carbide re-hobbing process, commonly known as skiving," says Lyford. "But with volume levels now four times what they were at the start of this project in early 2015, we needed a process that would greatly increase hard finishing throughput and free up more spindle time on the hobbers for rough cutting. The RZ 160 is delivering these benefits, and more."

Lyford estimates that at current part volumes, some 13,000 hours of machining time would have been necessary to finish the gears using the carbide re-hobbing process; the new Reishauer can finish the same number of gears in just 2,400 hours. In addition, the annual cost for tooling has been reduced from around \$300,000 for the solid carbide hobs used in the carbide re-hobbing process to an estimated \$25,000 for the multi-start grinding wheels used in the continuous generating grinding process.



Forest City Gear has also invested in several system enhancements that will add even more productivity to the system, according to Lyford. "At these volumes wheel dressing takes place frequently, about once an hour, so we've invested in a 'multi-rib' dressing diamond tool that dresses all five of the starts on the grinding wheel in a single pass, versus the usual process of dressing each start one by one," Lyford explains. "We're also awaiting delivery of a Felsomat 30-station, dual-pallet parts conveyor with a high-speed FANUC robot to automate workpiece load/unload for greater efficiency."

"For those in the global marketplace that have always known Forest City Gear as a low volume, high-precision manufacturer of one-off gears – guess again," Lyford says. "Today, we're prototyping, qualifying and producing gears at volumes no one would have expected here a year or two ago."

# Bohler-Uddeholm

## OPENS JOINT SERVICE CENTER WITH EIFELER

Bohler-Uddeholm has announced that the new joint Bohler-Uddeholm Service Center and Eifeler Coatings Technology PVD Coating Center are open for business. This Service Center of Excellence will strengthen Bohler-Uddeholm's tool steel and coatings offer and enhance the material processing capabilities and service in the Eastern Region of the United States.



In an effort to strengthen their overall position and value-added offerings in the marketplace, providing their customers and business partners with cost effective specialty tool steel material solutions, Bohler-Uddeholm Corporation has undertaken a project to enhance their material processing technologies focusing on better efficiencies and capabilities in the Eastern United States.

"This action has allowed us to increase our material saw cutting capabilities and capacity, along with adding larger material handling capabilities (seven MT cranes) and a machining center that has milling and Blanchard grinding capabilities," Jeff Albee, sales manager of region east at Bohler-Uddeholm, said. "This enhances our value-added product offering of square blocks and ground pieces to our valued customers. Our customers can expect same-day/one-day service for most orders. Combined with our extensive specialty tool steel grade offerings, Bohler-Uddeholm Corporation value proposition is second to none!"

"This new Coating Center offers primarily high quality PVD coatings to the metalforming industry in Ohio and neighboring states," Michael Reardanz, quality manager at Bohler-

Uddeholm said. "The Duplex-Tigral and Duplex-Variantic coatings will offer many benefits for our customers."

## Exsys Tool

### OPENS NEW FACILITY IN MEXICO

Exsys Tool, Inc. has opened a larger, all-inclusive facility in Monterrey, Mexico. The new Exsys Mexico S DE R.L. DE C.V combines a previous sales office and an off-site warehouse and repair facility under one roof. The facility will serve as a hub for meeting the growing demands of manufacturers throughout the country and will provide them innovative modular toolholding systems.



The facility's location allows Exsys to work more closely with customers and all major machine tool OEMs having a presence in Mexico. Customers will benefit from enhanced sales, service and applications support. The facility will also provide those repair services that were previously exported to the U.S. or Europe, and with its abundant warehouse space, Exsys will boost its Mexico inventory of most frequently ordered products to expedite delivery times to customers.

Cesar Vela, general manager of Exsys Mexico, will manage the new facility. He has extensive industry-related experience and a strong background in engineering, sales and the manufacturing sector in Mexico.

## Kyocera

### ACQUIRES SGSTOOL COMPANY

Kyocera Corporation announced that it has completed a share purchase agreement regarding the U.S.-based solid tool manufacturing and sales company, SGS Tool Company and its group companies (herein "SGS Tool"). Effective May 2, Kyocera will acquire 100% ownership of SGS Tool, and will rename the company as Kyocera SGS Precision Tools, Inc. By incorporating SGS Tool, Kyocera plans to increase sales of cutting tool business in North America by 2.5 times by fiscal year ending March 31, 2019.

Currently, Kyocera is expanding its cutting tool business globally with its main lineup of indexable cutting tool products.

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