Bosch Rexroth

EXPANDS RUSSIAN AUTOMATION MARKET

The modernization of the Russian industry is picking up speed. In 2011, Russia imported machines, plants, and equipment worth €29 billion and assured its position among the ten largest machine markets in the world. Despite these increased import levels, factories and plants still have a significant amount of catching up to do. Russia will thus continue to be a growth market for machinery construction in the years ahead.

At present, raw materials exports constitute 80 percent of Russia's exports. To reduce dependency on fluctuating raw materials prices, the Russian government is pursuing a modernization strategy for its industry, much of which is outdated. Surveys conducted by the Russian Union of Machine Builders have shown that over one million machines 20 years or older are in use at Russian factories. At the same time, the demographic trend increases the need for modern automation solutions due to the fact that the Russian population is estimated to decline by eight million individuals by 2020. The result is an ongoing high need for automation, especially for tasks which are very physically demanding.

The initial steps toward modernization are to import machines and plants. "But the modernization plans themselves also mean an exceptional opportunity for Russian machinery construction, if they are able to develop state-of-the-art modern machines very quickly," emphasizes Dr. Karl Tragl, chairman of the executive board of Bosch Rexroth AG. "To do so, they are looking for support from globally leading automation manufacturers, such as Bosch Rexroth." Russian universities and research institutions with whom the drive and control manufacturer works in close collaboration, also play a key role. Bosch Rexroth founded a country unit back in 2001 and covers the most important industrial regions of the Russian Federation at seven sites.

But raw materials extraction will also remain a key pillar for the Russian economy in the future. There is also an urgent need for modernization when it comes to raw materials extraction, the heavy industry, and power plants. For this purpose, operators preferably commission regional engineering companies, but these often still have little experience when it comes to modern industrial manufacturing equipment. Bosch Rexroth industry specialists support these companies in such projects with their global experience.

The company also develops modules and system solutions tailored to regional needs. Climatic conditions require all components to be suitable for use in very low temperatures for all outdoor applications. "Out in the natural gas fields in Siberia, workers have had to manually adjust the majority of controls and instruments on individual drilling equipment, even in temperatures as low as -50 degrees," as Dr. Tragl describes one of the many challenges. "We have developed arctic-ready adjustment units that now allow technicians to make the necessary adjustments from the heated control center with the click of a mouse."

Russia is also trying to reduce CO_2 emissions: in 2009, the Duma passed a law to increase energy efficiency. Bosch Rexroth offers several system solutions for more energy efficient processes for machines and plants. Ready-to-install drives for control fittings increase the efficiency of gas power plants as well as gas and steam power plants for power generation thanks to their dynamics and precision. Electrohydraulic system solutions for mobile machines such as tractors or excavators increase performance while offering low levels of diesel consumption. The Chairman of the Board is sure of one thing: "The modernization of the Russian industry has only just begun and will be one of the major growth drivers for international machinery construction in the intermediate term."

Siemens

LAUNCHES MANUFACTURING LEADERSHIP TOUR

Siemens Industry Sector has launched its "Manufacturing in America: Making Things Right" tour, a series of thought leadership events designed to explore the trends shaping America's next industrial evolution, and the challenges that still exist.

More than 2,000 online users joined a recent Siemens-sponsored "America's New Manufacturing" forum, presented by Washington Post Live. The forum brought together government officials and leading industry experts to discuss topics such as the new era in manufacturing, expanding manufacturing hubs, trends in manufacturing, workforce training, and innovations and advanced technology.

"Across the globe, and particularly in the U.S., the manufacturing sector is undergoing an evolution where innovation and manufacturing are merging, driving both product and process innovation. This is making industry more competitive and taking productivity and efficiency to levels never

(Left to right) Treasury Secretary Jacob Lew tours a Siemens manufacturing plant with Helmuth Ludwig, CEO, Siemens Industry Sector North America and Shujath Ali, plant manager (photo courtesy of Siemens).

experienced before," says Helmuth Ludwig, CEO of Siemens Industry Sector, North America.

"This industrial evolution is highly based on software and companies that have embraced this concept are experiencing a shorter time-to-market through efficient innovation cycles and enhanced flexibility using more data to individualize mass production. Advanced manufacturing is an important part of Siemens growth, and will provide the U.S. an edge in the future of our manufacturing sector."

On April 30, *IndustryWeek*, in collaboration with Siemens, presented the results of a manufacturing leadership survey that examined both tactical (i.e., hiring, improvement programs, and technology) and strategic (i.e., capital investments, supplier re-alignment, new product development) trends related to the manufacturing renaissance.

Smalley

RELEASES 50TH ANNIVERSARY PARTS AND ENGINEERING CATALOG

Smalley Steel Ring Company announces the release of the new 50th Anniversary Parts and Engineering Catalog for 2013. The new catalog combines previously existing Spirolox Retaining Ring and Wave Spring series with newly released series. Smalley's recently released Metric Hoopster and Laminar Seal Rings catalog have been incorporated into the new catalog, offering a comprehensive look at all of Smalley's 10,000 standard parts.

Smalley has manufactured Laminar Seal Rings for years; however, the increased popularity in metal seals allowed for the series to be incorporated into the catalog for the first time. Smalley Laminar Seal Rings are an alternative means of sealing components in assemblies from contamination. Laminar Rings can withstand higher temperatures and more corrosive environments than common O-rings or conventional rubber seals.

Smalley is pleased to offer the new catalog to its customers. George Nisbet, Smalley's vice president of operations, says, "The 50th Anniversary catalog celebrates 50 years of Smalley Steel Ring Company's commitment to excellence in quality, service and products that offer extreme value. For over 50 years Smalley Steel Ring Company has been the industry leader, setting the standard for on time delivery and product innovation."

Durst

APPOINTS VICE PRESIDENT BUSINESS LEADER

Durst recently announced that Terry McCormick has been promoted to vice president business leader, succeeding Bernie Nielsen, vice president and general manager, who retired effective March 31. Durst, a division of Regal Beloit America, Inc., meets the mechanical power transmission needs of the agricultural, construction, oil and gas, and industrial markets with innovative, cost-effective gearboxes.

McCormick comes to Durst by way of Regal's corporate headquarters in Beloit, Wis., where he had served as director of customer quality since 2012. He joined the global manufacturer of motors and related products in 2010 as director of quality for the Regal mechanical group, which includes Durst. At that time, he was based in Clinton, Wis.

McCormick is responsible for the day-to-day operation and profit and loss of the Durst division, as well as the strategic direction of its brands and products. An expert in the development and implementation of Lean Six Sigma and quality initiatives, he brings a lean approach to business management.

"By approaching quality from a manufacturing standpoint, you can design a process to achieve the highest yield with minimal defects," McCormick said. "You can apply that approach to business and yield the same desired results. One of the qualities that sets Regal apart is its process-based approach to every aspect of business. My own background and experience run parallel to Regal's philosophy."

Before joining Regal, McCormick was manager of manufacturing engineering and quality assurance at PBC Linear, a Pacific Bearing company. McCormick also spent 10 years as manager of manufacturing engineering at Haldex Hydraulics Corp. Earlier in his career, he worked for John S. Barnes Corp. He earned a degree in mechanical engineering from Michigan Technological University in 1986.

"The lean business process is all about operating at the most efficient and most proficient levels," McCormick said. "It is focused on driving waste out of the system, from order entry to shipment, with the people and processes you have in place. Regal has expanded through a combination of organic growth and targeted acquisitions. Durst is poised for further organic growth by producing the best brands in the market and selling more products. That is how we will surpass our competition."

Forest City Gear

LAUNCHES ROSCOE WORKS

Forest City Gear has begun operations in a new state-of-the-art facility designed to greatly improve lead times and quality for the production of precision gear blanks. This new division of Forest City Gear, called Roscoe Works and dedicated solely to the production of precision turning, operates from its own highly productive new 8,500 sq. ft. facility in close proximity to Forest City Gear's main facility in Roscoe, IL. That's very good news for Forest City Gear customers, says Roscoe Works General Manager Larry Cass. "Roscoe works gives us complete control over the quality and delivery of the blanks (and slugs) that are the 'near net shape' starting point for many of the gears we produce," Cass says. "The types of projects we take on here at Forest City Gear for customers around the world have never been more demanding from a quality and delivery standpoint. If we start off a project with turned blanks out of tolerance, or waiting for blanks from a supplier, this can ultimately create a devastating production bottleneck in our KanBan system where operations upstream are sitting idle waiting for product to arrive."

According to Cass, the new facility easily meets current capacity requirements, and gives the company much additional room to grow. For example, a new Hardinge Quest RS 51 MSY (Super Precision) Turning Center with 16 station turret, sub-spindle, and live tooling with C-Axis and Y-Axis gives Roscoe Works the ability to completely machine blanks and slugs in a single setup that includes all turning, milling and drilling operations. For faster production of larger blanks (up to 6" in diameter), Roscoe Works has installed a new Takisawa TT200G Twin Turret, Twin Spindle Turning Center. This machine can perform simultaneous turning of either identical, or first and second operations, simultaneously on twin spindles. A new Tsugami Swiss-Style Lathe and an Okuma CNC Vertical Lathe will soon replace two older machines and add still more capacity.