

The Integration Game

NORD DELIVERS IIOT, NEW TECHNOLOGIES AND SYSTEM EFFICIENCY

MATTHEW JASTER, SENIOR EDITOR

If the trend in manufacturing to consolidate equipment and run factories more efficiently continues—and it will—NORD Gear Corporation won't be playing catch up with the rest of the industry. They've made it a priority in recent years to serve customers in areas like material handling, packaging, conveyors, etc., by focusing on system integration and smart manufacturing.



“Improving system and equipment efficiency is a priority. We're trying to get rid of large control cabinets with our decentralized variable frequency drives (VFDs). These control cabinets take up a lot of space and can be quite expensive,” said Dan Breitbarth, engineering manager—control products at NORD. “Another thing we're trying to do is reduce the amount of cabling. If you have all these drives in one cabinet you've got to run individual motor leads out to each gearmotor. With our drive technology, you can set-up a group power feed to reduce the amount of cables necessary to power everything.”

Breitbarth said that NORD is producing gearboxes, motors, VFDs, controls and other drive solutions in 2019 to “help customers reduce spare part inventory, lower production costs and become more energy efficient.”

The company announced expansion plans earlier this year at its corporate headquarters in Waunakee, Wisconsin. NORD's newest expansion will add 86,000 square feet of office and manufacturing space. This will help NORD increase the company's capacity and ensure a continued short lead time delivery. The company currently delivers 24 percent of customer orders same day or next day, and 45 percent within five working days, including custom orders. NORD also added a \$6.2 million building expansion and new paint line in Wisconsin last year.

“Our customers benefit from quicker deliveries, less maintenance procedures and find a way to lower operating costs with NORD equipment,” Breitbarth said.

Mix-and-Match Components

NORD's success can be partly-attributed to the company's push for more modular and flexible components. “You can seamlessly pair our gearboxes and controls with our IE4 permanent magnet synchronous motors,” Breitbarth said. “Customers are demanding system solutions today, not just mechanical drives. Our products are very modular and interface with all the standardized information systems and networks.”

It's the push toward mechatronic solutions that makes it an exciting time to be involved in the industrial market, according to **Torsten Schultz**, president of NORD Gear Corporation.

“Mechanical engineers are cautious with the electronics. So we've made a huge effort to preprogram system features and capabilities within our components to make it easier for the mechanically-minded person to better understand the electronic side. We can broaden our applications this way and improve our relationships within different market segments,” Schultz said.

An example of this is NORD's ability to reduce the number of different variants in a drive solution. If you look at all the costs—purchasing, commissioning, use and maintenance for an intralogistics and airport application—you want a solution that provides reliability and long service life with lower operating costs. NORD can supply a LogiDrive system (an IE4 synchronous motor, a two-stage bevel gear unit and a NORDAC Link field distributor) which will reduce the amount of equipment needed to run the application and reduce the spare parts necessary to keep it running.

Lowering total cost of ownership and creating an energy efficient system along the way is a strong selling point in *any* industry.

“Energy efficiency is all about system efficiency, not just the motor anymore. We focus on the smallest details so our customers can concentrate on their own applications and not worry what the components are going to do or not do,” Breitbarth said.

Smart Planning

One of the most prevalent discussions with NORD's customers today is about preventative maintenance and smart manufacturing.

“Each application is different so there's not a one-size-fits-all solution. Utilizing specific features of NORD Control products, such as our internal PLC, enables us to potentially write a program that can perform trend analysis. For example: How many times the motor current goes above a certain threshold,” Breitbarth said. “The range of how simple or



complex this reporting needs to be varies from customer to customer. We have the toolbox to assist in areas like predictive and preventative maintenance moving forward.”

“Monitoring everything from temperature to speed to voltage and being able to make deductions with this information is critical,” Schultz added. This is another way to examine your productivity without generating extra costs.”

NORD recently launched a new mobile app and a Bluetooth dongle that can plug into their systems using an Apple or Android phone to collect and monitor information.

The NORDCON App enables diagnosis, analysis, parameterization and monitoring of NORD drive systems using a mobile terminal device for service calls. Convenient and intuitive operation is presented by dashboard-based visualization, quick access to parameters and a backup and recovery feature. Drive analysis is supported by an individually configurable oscilloscope function. A Help function, video tutorials and the option for direct contact with NORD complete the app.



The NORDAC Access BT is a Bluetooth stick that is used directly with the variable frequency drive. This allows convenient mobile access to the drive status, parameter settings, and diagnostic information. The NORDAC Access BT can be used to save parameter data using the Bluetooth Stick (without using the App). Users can transfer parameters from one VFD to another. Parameter transfer between a drive and a PC is also possible.

Schultz is pleased with these new smart components, but notes that the industry is still in its infancy regarding IIoT and Industry 4.0 solutions.

“People are being cautious about these technologies, particularly from a security standpoint. Our customers are very interested, but the question is how do we successfully bring it to market, fine tune it and see how these tools can really impact their day-to-day operations?” Schultz said.

Growing Opportunities

Nord’s systematic approach is paying off in several different areas, most notably, in material handling applications like



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food and beverage, warehouse logistics and baggage handling.

“Airport baggage handling is one of the fastest growing segments at NORD. Over the past years, NORD has built a significant market share in this market segment,” Schultz said.

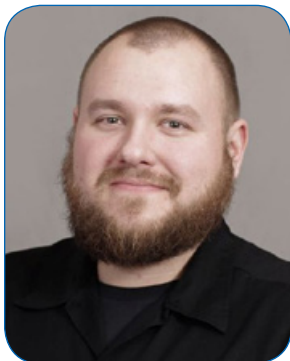
There are many engineering challenges involved in baggage handling systems including miles of conveyors, in-line CT-scan screening machines, multiple in-feed lines, four-way sorters, high-speed diverters and more. NORD has utilized its gear reducers, motors and VFDs in airports such as Charlotte, Oklahoma City, Cleveland, London, Montreal and Istanbul—to name a few.

“These global customers need engineering knowhow and the confidence that the products being utilized can do the job,” Schultz said. “NORD is really reaping the benefits after putting in years of hard work and preparing our organization for the technology changes in these markets.” He added, “Together with our success in the intralogistics and food & beverage industries, we are experiencing our third year of double-digit growth.” (www.nord.com)

Forest City Gear

ADDS PROCESS ENGINEER TO ‘CUT TEETH ONLY’ OPERATIONS TEAM

Forest City Gear has added **Joe Konetski** as process engineer to its ‘Cut Teeth Only’ operations team, a resource dedicated to meeting fast-growing demand for the completion of gears made from a customer’s gear blank.



Konetski joins the Cut Teeth Only Team after serving as a setup technician for a wide variety of gear cutting and grinding machines at Forest City Gear. He is also a graduate of Forest City Gear’s four-year Apprenticeship Program, conducted in cooperation with the Rock River Valley Tooling and Machining Assoc. (RRVTMA). The program is intensive, requiring 8,000 hours of on-the-job training, and 604 hours of related training at nearby Rock Valley College, and is the ideal preparation for Konetski’s new role, says John Cochran, the Cut Teeth Only Team’s Lead person.

“We’ve cut leadtimes and streamlined production on Cut Teeth Only projects to meet unprecedented high demand with the help of a dedicated team of process engineers that takes ownership of a project from the P.O. through scheduling and production,” says Cochran. “Joe’s typical of our team: knowledgeable, experienced and, above all, able to wear a multitude of hats.” (forestcitygear.com)

Napoleon Engineering Services

ACHIEVES NADCAP CERTIFICATION

Napoleon Engineering Services (NES) is proud to announce that it has achieved accreditation by the National Aerospace and Defense Contractors Accreditation Program (NADCAP) for Chemical Processing.

NADCAP was created in 1990 by SAE Inc. and is administered by the not-for-profit Performance Review Institute (PRI), a global provider of customer focused solutions. NADCAP provides company level accreditation based on specific processes, such as chemical processing, used by aerospace suppliers.



This accreditation means that NES is in line with NADCAP’s standardized approach to quality assurance, which replaces routine auditing with more in-depth, technically superior, special process audits, and it demonstrates NES’s commitment to quality and safety while also providing increased customer satisfaction.

“NADCAP accreditation is an integral part of our overall commitment to the aerospace industry and the quality of the products we produce,” said Christopher Napoleon, president of NES.

NES has a strong track record of providing bearings and bearing services to the aerospace and defense industries, delivered through highly qualified staff using exceptional engineering and cutting edge technology. NES has worked hard to achieve NADCAP status as a measure of their commitment to excellence. (www.nesbearings.com)

Kollmorgen

ANNOUNCES NEW EMEA VICE PRESIDENT/GENERAL MANAGER

Kollmorgen announced today that **Alberto Favalessa**, formerly managing director for Italy and Switzerland, has been selected as Kollmorgen's new VP/GM of EMEA operations. His appointment is effective immediately.

Favalessa has been with Kollmorgen's EMEA sales operations since 2000 in positions of increasing responsibility. As managing director of Italy and Switzerland, Favalessa has successfully built Kollmorgen's motion control business in key industrial automation and automated guided vehicle segments. His approach to designing integrated motion solutions has made him a valued partner to key customers. His team-based approach to problem solving and continuous improvement has made him an equally trusted and respected leader within the company.

"Managing the EMEA & India regions for the leader in motion control is certainly a source of pride for me," says Favalessa. "There are few companies in the world that can boast a history of over a century of innovation and this legacy gives me great motivation. I thank the company for the trust given to me. The technologies Kollmorgen has developed for servo systems and for automated guided vehicles continue to achieve increasingly high standards for performance and reliability. These solutions provide the foundation for conversations with customers about innovation, service, and results. I look forward to driving the company's continued advancements in all of these areas."

Alberto Favalessa succeeds Markus Johansson, who leaves the Kollmorgen team well-positioned to accelerate its current positive momentum well into the future. "I can think of no one better to lead our EMEA team," says Kollmorgen President Dan St. Martin. "Over his 20-year tenure with our company, Alberto has demonstrated a passion for building strong customer relationships and solutions tailored to each customer's specific needs. Alberto has proven his ability to not only achieve business results, but also to inspire and develop our employees. We rely on his leadership and on his deep knowledge of the business and are confident he'll be successful in this latest assignment." (www.kollmorgen.com)



Omron Microscan

APPOINTS PRESIDENT AND CEO

Omron recently announced **Andy Zosel** has been appointed as the new president and CEO of its Omron Microscan business located in Renton WA. Zosel joined Microscan in 1997 as a design engineer and has since held several leadership positions in customer service, marketing and engineering. Most recently, he served as senior vice



president of engineering and commercial operations for Omron Microscan. He brings a unique blend of both technical aptitude and customer focused strategic marketing. According to Nigel Blakeway, managing executive officer, chairman of Omron Management Centers of America, Europe and Asia Pacific, "Andy began his career with Microscan over 22 years ago and has progressively grown his career with the organization during this time. I am confident Andy will continue to successfully lead the organization well into the future." "Andy is a proven leader with strong engineering skills and the ability to bring people together. He represents the Omron values of innovation driven by social needs, challenging ourselves and respect for all," stated Junta Tsujinaga, managing executive officer and senior general manager, product business division industrial automation Company at Omron Corporation. "His vision for applying Omron IAB's innovative-Automation concept to Traceability solutions is exactly what Omron Microscan needs as the company enters its next chapter of growth." "I am excited about the opportunity to lead the Omron Microscan team," says Zosel. "Omron has significantly invested in engineering talent. We have a great team and a compelling roadmap of solutions that will help our customers meet the future demands of Traceability. Our focus is on delivering the next generation of Traceability solutions that will combine Automatic Identification with Omron's unique 'innovative-Automation' concept to improve total production visibility." Since the acquisition of Microscan Systems, Omron has invested in the development of new products and integrating code readers with Omron's automation technology. Omron Microscan seeks to offer comprehensive Traceability solution packages that are tailored to the challenges faced by each industry. In recent years, manufacturers have become committed to achieving more exacting traceability and enhancing governance regarding product safety. In doing so, they can respond to growing demands for product safety and security, while eliminating quality issues. Zosel will continue to be based in the Omron Microscan headquartered in Renton, Washington. (www.omron.com)

Twin Disc

APPOINTS FEIERTAG AS PRESIDENT AND COO

Twin Disc, Inc., a global leader in power transmission technology for marine and land-based applications, has appointed **James E. Feiertag** as president and COO, effective May 1, 2019. Feiertag assumes the role of president, previously held by CEO John H. Batten, and replaces COO Mac Moore, who retired on May 31, 2019.



In this role, Feiertag will be responsible for overseeing the functions of operations, sales, marketing, distribution and engineering.

Since 2014, Feiertag has been president and CEO of Bemis Manufacturing Company in Sheboygan Falls, Wisconsin. Prior to that, he was employed at Twin Disc for 14 years, most recently as executive vice president. During his tenure, he had a variety of global and regional responsibilities in operations, sales and marketing, distribution, engineering and global sourcing. Prior to joining Twin Disc in 2000, Jim spent 21 years at Rockwell Automation in various roles. Feiertag earned a BBA from the University of Wisconsin-Whitewater and an MBA from Marquette University.

“We are thrilled to welcome Jim back to Twin Disc,” said John H. Batten, CEO of Twin Disc. “His leadership, knowledge and experience in our markets, coupled with his intimate knowledge of our company, will serve us well.” (www.twindisc.com)

Varvel

REWARDS TOP STUDENT IN RACING MOTORCYCLE ENGINEERING COURSE

Commitment, competence and excellent performance are some of the key characteristics of the Varvel Group, the Bologna-based company that has been designing, manufacturing and supplying industrial gearboxes since 1955. The socially responsible Varvel Group has always invested in young people. For a number of years now, the group has also supported projects promoting collaboration between centers



of scientific learning and the manufacturing sector. As part of this commitment, this year again, Varvel is rewarding the best performing student in the masters degree course in Racing Motorcycle Engineering organized by the Bologna-based Professional Datagest higher education organization.

This partnership dates back to 2012, when Varvel helped finance two students from towns in Emilia affected by the earthquake of that year. This year, Varvel has made a tangible contribution to the seventh edition of the course, rewarding Marco Radaelli, the student who has demonstrated the greatest talent and passion, commitment and determination. Marco has excelled over intense months of theory and practice sessions, exams and tests to finish in pole position ahead of his colleagues in the masters course.

“Life is a challenge, and the real race is yet to begin,” commented Mauro Cominoli, the Varvel Group’s general manager, “but Marco has certainly shown a determination to be first across the finishing line and we are delighted to help him continue his race.” (www.varvel.com)

Huco Direct

OFFERS NEXT DAY SHIPPING FOR ONLINE ORDERS

Huco has launched an e-commerce service at the website below that allows end users to order precision couplings direct from its manufacturing headquarters. The online platform has been created to allow small-volume orders to be delivered globally, with next day shipping on standard orders. The service is ideal for design engineers or MRO operatives who frequently need parts delivered to extremely tight deadlines.



Huco, a premier brand of Altra Industrial Motion Corp., offers a variety of precision couplings for industrial and commercial applications.

The Huco Direct service allows engineers to order genuine parts direct from the manufacturer – offering quality advantages as well as reliable delivery times. Suppliers who deliver from stock often run out of popular items, which can mean customers are left waiting weeks for replenishment. Huco can ensure next day shipping for all standard orders because of its flexible manufacturing system.

Online customers can select the bore size and specify if a keyway is required before making orders to guarantee that the perfect coupling is chosen. Technical specifications for each product are included as well as a free CAD download service available to all registered users. A selection of air motors, service kits and gearboxes are also available to order online. (www.hucodirect.com)