



New Hampshire Ball Bearings, Inc.
— A Minebea Company —

inside track

nhbb.com

New Manufacturing Facility Opens in Europe

myonic GmbH is now operating with 20% more production capacity, thanks to the opening of its new manufacturing facility.

The fully air-conditioned facility includes a production area of approximately 21,500 sq ft (2,000 m²), plus 25% more room for future expansion. The additional space enabled myonic to consolidate production operations at leased facilities and restructure them within the headquarters plant, increasing production efficiency. Connected to myonic GmbH headquarters in Leutkirch, Germany, the new building took nine months to construct.



The new eco-friendly building design increases myonic's production efficiency while lowering its environmental footprint.

The building was designed with very few interior pillars, a jointless floor plate, and large windows. Its clear span-type architecture enabled myonic to convert its floor plan from a technology-oriented layout to a highly flexible product-oriented cell manufacturing design. The building also includes a sophisticated underground water cooling system, which will reduce myonic's environmental footprint.

myonic's parent company, Minebea, invested several million dollars in the project to support future business opportunities. Given myonic's anticipated growth, it was projected that the original facility in Leutkirch would be undersized by 2015.

myonic GmbH specializes in highly engineered mechanical assemblies and high-precision miniature ball bearings. myonic was acquired in 2009 by Minebea and is part of the NHBB/myonic Business Unit. Its products are used in aerospace equipment, dental instruments, computer tomography, and other medical devices. In the US, myonic's products are sold through myonic USA, a division of NHBB.

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NHBB Repeats as CSI Supplier Honoree



Mary Beth MacKenzie

For the third consecutive year, NHBB's Precision Division was given the Circle of Champions award by Cardiovascular Systems Inc. (CSI). Based in St. Paul, Minnesota, CSI is a leader in the assessment, development and commercialization of medical devices for treating peripheral arterial disease. NHBB achieved this honor by meeting or exceeding CSI's established quality and delivery performance goals, which include 100% effective lot yield, zero supplier corrective actions requests, and 100% on-time delivery. "We are committed to achieving the highest level of supplier performance on behalf of all our customers," said Mary Beth MacKenzie, Precision's product sales manager. "Earning this honor from CSI yet again truly illustrates our dedication to providing excellent service, year after year."



Gary Yomantas

A Message from NHBB's President

Today, US manufacturers face the challenge of satisfying escalating customer expectations while overcoming the added pressures stemming from an aging workforce and a decline in new, technically skilled workers. At NHBB, we recognize that routine employee recruitment and retention programs may not be enough to sustain the level of productivity required by our aerospace customers. That's why our strategic plans include measures designed to attract, train, and retain the next wave of highly skilled employees. While these issues affect all three of our divisions, they're more acute in our two New Hampshire facilities.

The person leading the way in developing our workforce is Gary Groleau (see below). As our corporate manager of labor relations and organizational development, Gary is a prominent workforce development activist within NHBB and throughout New Hampshire. Through his initiatives and those of the divisional HR teams, NHBB is collaborating with secondary and post-secondary education institutions to rebuild the curricula for technical education. For example, Gary sits on the NH Board of Education, where he advocates for the educational needs of the state's advanced manufacturing sector. At the division level, NHBB offers student internship programs to support the creation of strong tech programs at nearby colleges and universities. Such external initiatives will take time to bear fruit, so we've also implemented comprehensive employee training programs. At our Precision Division as well as our two facilities in NH, we teach everything from basic shop math to advanced gaging techniques, and from the basics of communication to the subtle art of leadership. Such programs are essential to achieving more immediate gains in employee skills development.

As these strategic initiatives illustrate, NHBB is dedicated to building an education and training infrastructure that will increase the technical know-how of the next generation of highly trained employees. After all, we're counting on them to carry on the tradition of meeting our customers' growing needs, well into the future.



Gary Groleau

NHBB Executive Honored for Tackling Region's Skills Gap

Gary Groleau, corporate manager of labor relations and organizational development, was presented with a Community Impact Award by the Belknap (New Hampshire) Economic Development Council (EDC) at their annual meeting held in March.

The Belknap EDC recognized Gary for his efforts to address the skills gap in the region's manufacturing sector, most notably his involvement in establishing the Advanced Manufacturing program at the Lakes Region Community College, and the Manufacturing Engineering Technology program at the Huot Technical Center, which provides technical education programs for high school students throughout the region.

As NHBB's expert in labor issues and employee advancement, Gary is responsible for union labor relations, workforce training and development, NHBB's Professional Development Process (PDP), job skills training, and short- and long-term workforce recruitment strategies.

Gary holds a BA in English Education from the University of New Hampshire and a Masters in Community Economic Development from New Hampshire College. He is working towards a Doctor of Education degree (EdD) in Organizational Change from Pepperdine University.

HiTech Earns Honeywell International SARL Supplier Award

The European business unit of Honeywell has awarded HiTech with a supplier honor for the division's superior performance in 2012. To earn this distinction, HiTech met Honeywell International SARL gold-level performance standards by achieving 95% on-time delivery and close to zero quality escapes, and by earning high marks in various customer service categories, including responsiveness, flexibility, pricing, and supplier portal utilization.

"HiTech is pleased to be the only supplier to earn the 2012 Honeywell International SARL award for outstanding commitment to quality and performance," said Mike Katra, HiTech's product sales manager. "HiTech has achieved gold level performance at Honeywell International SARL through an organizational focus to exceed our customer's expectations every time."

NHBB's HiTech Division, located in Peterborough, New Hampshire, manufactures large precision ball and roller bearings for various aircraft jet engine applications, including main shafts, gearbox, auxiliary power units, and more.

Innovative Retainer Targets Life-Limiting Wear

NHBB has developed a specialized polymer retainer design that promises to increase the life of precision angular contact bearings for high-speed medical and dental applications.

The retainer is the most common limiting factor in precision ball bearings that operate at high speeds. It is intentionally designed for a close fit against the inner or outer land in order to eliminate retainer wobble and vibration, which occurs during mid to super-high rpm. But as the retainer rotates, contact with the bearing rings causes the retainer surface to wear out.

Our patent-pending retainer extends bearing life by reducing retainer wear through modified geometry that reduces the contact area between the retainer and piloting land.

The retainer is the achievement of NHBB's product development and testing lab located within the Precision Division. The lab's objective is to help our applications engineers solve challenges and improve product performance for our aerospace, dental, medical, and high tech customers.

The lab performed countless dental handpiece life cycle tests and measured everything from handpiece noise and vibration to starting torque and rotation speed. After such a meticulous development effort, tests confirmed that the new design lasts up to 30% longer than a standard retainer in a comparable application.

Medical and dental OEMs interested in exploring the performance advantages of this new specialized polymer retainer are encouraged to contact the Precision Division's applications engineering team, which can develop a prototype for testing purposes.

For more information, call 818.993.4100.



Army Helicopter Fleet Commander Visits Astro

Representatives from Bell Helicopter's Army Programs and Fielded Systems division and the US Army's Bell OH-58D Kiowa Warrior helicopter fleet visited Astro recently to thank NHBB for supporting the program and to encourage the company to sustain that support in the future. Kiowa fleet program manager Lieutenant Colonel Mathew Hannah and Bell employees Jim Shultz (program manager) Lisa Harper (supply chain manager), and Josh Compton (procurement specialist) met with division managers, listened to a brief company overview, and toured the facility. Afterwards, LTC Hannah expressed confidence in NHBB as a key supplier to the program. "I am pleased to learn about the level of NHBB's involvement in the aerospace market, particularly with helicopters," said Hannah. "It's evident from this visit that NHBB is a top-notch supplier to the defense industry and has what it takes to make the Kiowa combat helicopter program successful."



During his visit, LTC Mathew Hannah met with NHBB's military veterans, thanking each of them personally for their service. He also presented Challenge Coins to employees Andrew MacDonald (shown here) and Sean Bean, who distinguished themselves during recent military tours overseas.

Precision Earns Nadcap Cert.



Nadcap auditor Performance Review Institute (PRI) informed NHBB on April 26, 2013 that the Precision Division was granted and awarded Nadcap accreditation AC7108

Rev F for chemical processing — including passivation per SAE Aerospace Standard AS7003. PRI conducted a Nadcap accreditation audit of the Chatsworth facility from March 18 to 20, 2013. Nadcap accreditation entitles NHBB to appear on the Qualified Manufacturers List (QPL), which can be found at eauditnet.com. The certificate is available on the company website at nhbb.com/about/qa.aspx.

Spotlight on Microsites

Check out NHBB's newest online resources:

invinsysbearingsystem.com

Featuring NHBB's long lasting helicopter pitch link control bearing system

nhbb-myonic.com

Highlighting NHBB and myonic's specific capabilities related to the medical and dental industries

oscimax.com

Featuring NHBB's uniquely advanced machinable, self-lubricating liner technology



Beth Tyle
 Inside Sales Rep – HiTech Division
 Peterborough, NH Years at NHBB: 2

NHBB in Person

I really enjoy my co-workers. Everyone is very helpful, knowledgeable, and professional. They make it easy for me to take my work seriously and still have some fun at the same time.

Managing my customers' expectations, as well as providing them with timely and accurate information, can be a real challenge at times. But I feel a great sense of accomplishment when our customers have what they need and are happy with the service they receive.

In the future, I'd like to enhance my relationship with my customers by visiting more of them in person. Sometimes it's not enough to read a list of part numbers on a piece of paper; touring a facility and seeing a helicopter that uses our bearings really puts things into perspective for me.

My primary job responsibilities are managing the day-to-day needs of my customer accounts, including order status, quotations for current business as well as for new programs and applications.

For comments or questions about *Inside Track* contact:

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Heli Expo

NHBB made the most of our first year exhibiting at the **Heli Expo** in March by displaying our full line of precision bearing products and solutions, including two of our newest innovations: Oscimax® machinable self-lubricating liner technology and INVINSYS® pitch link control bearing system. Shown here working the booth are: Paul O'Brien, Astro Div. product engineering manager; Brandyn Lewis, Astro Div. senior special projects engineer; Alan Brakefield, NHBB senior field sales engineer; and Gino Crecco, Astro Div. sales manager. (Not shown but also in attendance: Josh King, NHBB senior field sales engineer).



MD&M West

NHBB and myonic were back at the **MD&M West** show in February, showcasing high-precision and custom-engineered products and solutions for the medical industry. Shown here working the booth are: Alex Garcia, Precision Div. applications engineering manager; Carroll Purvis, Precision Div. senior key account/new product administrator; Jeff Schad, NHBB's district sales manager for the Western Region; Mary Beth MacKenzie, Precision Div. sales manager; Wayne Vanderneut, senior product specialist for myonic USA.



NHBB Tradeshow Calendar

MD&M East

June 18—20, 2013
 Pennsylvania Convention Center
 Philadelphia, PA
 Booth #3645
 MDMeast.com

Paris Air Show

June 17—23, 2013
 Le Bourget
 Minebea Group of Companies
 Hall 4, Lane F, Booth 48
 paris-air-show.com

High Achievers Honored at Annual Sales Meeting

Join us in congratulating the following individuals for their exceptional efforts in FY2012:

Sales Engineer of the Year

Alan Brakefield
 Senior Field Sales Engineer
 Western Region

Outstanding Achievement

Steve Alpers
 Senior Field Sales Engineer
 Western Region

Customer Service Representatives of the Year

Ryan Langridge
 Astro Division
Bryan Dela Cruz
 Precision Division

Extra Mile Award

Brandyn Lewis
 Senior Special Projects Engineer
 Astro Division