



New Hampshire Ball Bearings, Inc.

A Minebea Company

www.nhbb.com

# inside track

## NHBB Tests Anti-Bacteria Benefits Of Patented Silver Coating For Bearings

Pure silver is beautiful, but its beauty goes far deeper than its appearance. NHBB's patented ball bearing with a silver-coated polymer retainer may soon become the world's first high-speed bearing with anti-bacterial properties for use in the medical and dental fields.

According to medical historians, silver has served as a disinfectant for over 3000 years. Modern research confirms that even microscopic particles of silver (used to coat tweezers, catheters or implants) kill bacteria through several routes, including weakening the cell membrane and disrupting cell division. While germs have become resistant to certain antibiotics, they are still very vulnerable to silver.

NHBB first began using silver as a solid lubricant because it improved dental bearing life and performance. The silver overlay on the polymer retainer serves as a long-lasting lubricant that is applied once at the factory in addition to conventional lubricant. The silver allows the bearing to continue to operate under conditions of marginal conventional lubrication or lubricant starvation. A soft and pliable metal, silver also reduces friction to improve bearing performance.

NHBB's ball bearings with the silver-coated retainer are used in dental and medical surgery handpieces. Because the bearings are usually close to the cutting tool and can't be completely sealed off, they could become contaminated. That's why NHBB is



looking thoroughly into the antiseptic, antimicrobial properties of silver.

An independent laboratory will be testing the antimicrobial properties in NHBB's silver-coated retainer. The bearings are dipped in a solution containing families of bacteria, then checked over set periods of time to determine if the bacteria population changes. The silver should make it impossible for bacteria to survive.

If the tests prove that the silver overlay acts as a disinfectant, NHBB will be able to offer a bearing that helps resist bacteria 

## myonic Moves into R&D Leadership for Medical

"Twelve years ago we started at zero in the X-ray tube industry; now we're on the way to being number one in the world, providing X-ray bearings and subassemblies," reports Walter Heilmann, the Managing Director of myonic GmbH. He is justifiably proud of his company's achievements in the medical and dental fields. A division of Minebea Co., Ltd., along with New Hampshire Ball Bearings, myonic designs and manufactures precision miniature ball bearings (as small as 1 mm bore, 3 mm outside diameter).

Heilmann stresses that manufacturing bearings—a myonic expertise since 1936—is only the starting point for myonic's success. "We always listen very carefully to our customers," he relates. "We knew that the manufacturers of mammography X-ray machines were receiving complaints about the noise made by bearings in the X-ray tube. We developed low vibration bearings with a special coating and geometry that reduced the noise from over 60 dBA to below 45 dBA. The X-ray tube manufacturers were also not happy about having to coat and assemble the bearings into the housing themselves, so now we provide next-level assemblies that simply slip into the tubes."

myonic also provides next-level assemblies for dental handpieces and other medical devices. Because myonic understands the interaction of bearings with the other



**myonic**  
more than a bearing

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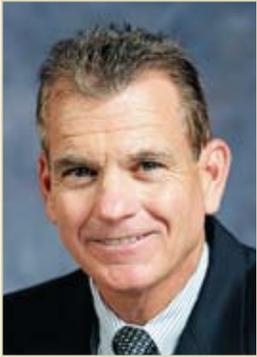
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## A Message from NHBB's President



Gary Yomantas

For more than twenty years, NHBB has worked to establish an empowered organization on behalf of our owner, our employees, and especially our customers.

An important catalyst for this objective is employee training and development. As the adjacent article illustrates, we have expanded our training programs significantly in the past five years. Today, our programs cover a wider range of skills and abilities than ever before, including everything from basic shop math to advanced gaging techniques, and from the basics of communication to the subtle art of leadership.

In-house training is but one aspect of a larger initiative; we also provide support for additional schooling as well as professional development opportunities. At NHBB we place a high value on formal education. Our tuition reimbursement program is open to any employee who wishes to pursue a bachelors or masters degree related to their job responsibilities. This year 20 employees are enrolled in the program in order to study in such fields as engineering, business administration, marketing, and accounting. Succession planning is another vital part of the training and development process. We have set in place a process by which we identify and develop the company's leadership for tomorrow. This process ties into the professional development planning (PDP) process that was first initiated by Gary Groleau at the Astro Division and is now available company-wide.

As we look toward the future, it's difficult to project our specific training and development needs. However, one thing is certain. We'll remain dedicated to creating an empowered company that's flexible enough to respond quickly to whatever needs arise. ●

## Precision's Leadership Program Fosters Teamwork

"A smart way of doing business" is how Richard Conner described NHBB's employee training and development initiatives. Richard Conner is NHBB's Director of Human Resources. He says employee training is what links employee recruitment, retention and job satisfaction together with excellent organizational performance and customer service.

"You cannot have a top performing organization without top performing employees," said Richard. "Employee training and development is a win-win for our employees and the company. It helps employees grow professionally and leads to improved business performance."

NHBB's current slate of training initiatives covers everything from technical skills needed on the shop floor to communication skills useful at all levels of management and supervision. The Precision Division has chosen to concentrate its training efforts on leadership, communication, and team building skills.

Every month, Precision's HR department conducts a mandatory, one-hour leadership seminar for all manufacturing leads, supervisors, and managers. Participants are exposed to a wide array of people skills, including stress management, active listening, effective speaking, negotiation, emotional intelligence, and ethics.



Managers, supervisors, and employees attend a monthly leadership seminar.

"Each session is designed to teach a discreet skill-set, like how to resolve conflict or give a positive review or listen to others," said Maria Fernandez, Precision's Human Resources Manager. "But the program as a whole has a much broader goal, which is to build a culture of teamwork based on open communication, collaboration, and trust."

Jesse Ontiveros is a manufacturing Unit Manager in the turning, tumble, and heat treat departments. Jesse has worked at NHBB for 25 years, and over 40 employees work under him. Jesse has participated in the leadership seminar since the program's inception. He believes the leadership training has instilled greater collaboration and cohesiveness between the different manufacturing departments.

"The environment here is hectic. Everyone is always busy and there are always interdepartmental issues to resolve," said Jesse. "The biggest change I've witnessed involves our communication skills. Everyone is listening to the concerns of others, which has promoted greater trust and respect. It feels as though we are all working toward the same goals, like a team should."

Richard Conner says that NHBB's dedication to being an exceptional company is evident in the current slate of training and development initiatives like Precision's leadership program. "We are providing our employees multiple paths for professional development, which is the right thing to do," said Conner. "At the same time, it makes good business sense, because it takes a skilled, satisfied, and committed workforce to continually meet customer needs." ●

## myonic moves into R&D

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components, the subassemblies are manufactured far more precisely, have a longer life and require less maintenance.

Heilmann traces this ability to meet customer needs back to the structure of myonic and the fact that the entire staff, from management to assembly workers, is considered a customer representative. The company has two teams, one for medical and dental and one for aerospace and X-ray, each composed of representatives in the core disciplines, including sales, manufacturing, and engineering.

Wayne Vanderneut, Senior Product Specialist with myonic USA, cites the "tremendous amount of back and forth" between departments to benefit customers. In one project, this team effort enabled delivery of a prototype four times faster than the client expected. "Our teams are very agile," he states. "We have the technology, we have the business systems, but it's our people and their ability to collaborate that allows us to adjust quickly to customer needs. We've figured out how to weld materials that other people said couldn't be welded, how to create new and better lubricants, and how to bring major advances into dependable, routine production at a reasonable cost. That's because we have the right people in the right mix."

Currently, myonic devotes 65% of its resources to the medical and dental market. The company conducts continuous research into materials, lubricants and techniques that allow new geometries and promise a much longer bearing life under the highest rotational speeds and severe environmental conditions, such as vacuums and extreme temperatures.

"We've watched our competitors reduce research, engineering and customer service under price pressure," Heilmann says. "We do just the opposite. In the next five years, we're going to be Minebea's global technical competency center, a research and development driven organization, for the latest medical and dental bearing technology."

myonic meets with every potential customer to make sure that myonic understands the project, it fits into myonic's areas of expertise, myonic can produce a quality solution on time and there's a basis for a long-term relationship. If those criteria can't be met, myonic passes on the project. "Our approach," says Heilmann, "is that everything is possible if you set the right goal. You choose your goal carefully, you put your team in place and get the people involved and aligned, then let them get on with the job. You let them fulfill their vision." ●



X-ray tube bearings

## A Partnership on Display at MD&M West

NHBB and myonic are exhibiting once again at the 2011 MD&M West and East tradeshows in order to build awareness of their partnership as leading suppliers to the medical device industry.



*Working last summer's show were (l to r): John Leger, Senior Sales Engineer, Eastern Region; Wayne Vanderneut, Senior Product Specialist, myonic USA; Mary Beth MacKenzie, Product Sales Manager, Precision Div. and myonic USA; Mike Katra, Regional Sales Manager, Central Region; Alex Garcia, Applications Engineering Manager, Precision Division.*

The two companies are promoting their full line of miniature and instrument bearings and emphasizing recent technological advances for high speed applications, including machined retainers, ceramic balls, high-performance steels, and NHBB's patented composite metal-polymer retainer.

Additionally, myonic is showcasing its core strength as a manufacturer of precision mechanical subassemblies for various medical procedures, such as arthroscopic surgery, blood analysis, cardiovascular diagnosis and treatment, and laser surgery.

As subsidiaries of Minebea Co., Ltd., NHBB and myonic are affiliated as a global business unit. In the U.S. market, myonic products are sold by myonic USA, a division of NHBB. ●

### Mark Your Calendar

2011 show dates:

<b>MD&amp;M West</b>	<b>MD&amp;M East</b>
February 8-10	June 7-9
Anaheim	Jacob K. Javits
Convention Center	Convention Center
Anaheim, CA	NYC
Booth #3281	Booth #1931

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## Ida Seow

Inside Sales Supervisor  
Precision Division  
Chatsworth, CA  
Years at NHBB: 10

## NHBB In Person

"I look forward to coming to work because every day is different," said Ida Seow, the Inside Sales Supervisor for the Precision Division. "And I work with such wonderful people, customers and coworkers alike."

Looking back, Ida is amazed at how quickly she became the Inside Sales Supervisor for the Precision Division. "I was promoted to Supervisor in March of 2001, a little under a year after I joined NHBB."

In addition to her responsibilities as supervisor, Ida manages the workflow of several key accounts and serves as Precision's newly appointed Export Compliance Administrator.

"My latest challenge is to become accomplished in export compliance," said Ida. "But my long term goal is to be like Carroll Purvis when I grow up." ●

## Carroll Purvis Earns Promotion



Carroll Purvis

NHBB is pleased to announce the promotion of Carroll Purvis to Senior Key Account/New Product Administrator. Carroll has been an integral part of the Precision Division's customer service department for 28 years, during which she has served as Sales Coordinator, Inside Sales Supervisor, and, most recently, Product Specialist.

In addition to supporting key customers, Carroll manages prototype activity, ensuring a timely response to customers' design needs, and she provides product support to Inside Sales and Application Engineering. Carroll also serves as a team leader for NHBB's participation in the Medical Design & Manufacturing Tradeshows.

"Throughout her career, Carroll has been recognized by her customers and peers alike for her exceptional service," said Mary Beth MacKenzie, Sales Manager for the Precision Division. "From a technology standpoint, Carroll is also one of the most knowledgeable professionals in the bearing industry. We are extremely fortunate to have her on our side."

Carroll's promotion was first announced in the fall of 2010. ●

## Purvis and Seow Honored for Going Above and Beyond



During NHBB's annual sales meeting last summer, NHBB presented Carroll Purvis and Ida Seow with the Extra Mile Award for their outstanding service to customers. Carroll (l) and Ida (r) are shown here with Terrie Maddox (l), Senior Sales Engineer from the Central Region who was named the Sales Engineer of the Year, and Josh King, Senior Sales Engineer from the Central Region who was the recipient of NHBB's Outstanding Achievement award. Not shown is Laura Lavigne from the HiTech Division who was named NHBB's Customer Service Representative of the Year.