Richard J. Harshman Succeeds  
L. Patrick Hassey as Chairman, 
President and CEO

Allegheny Technologies Incorporated (NYSE: ATI) announced that Richard J. Harshman, 54, has become Chairman, President and Chief Executive Officer of ATI succeeding L. Patrick Hassey who has retired. Mr. Harshman also has been elected to serve as a member of ATI’s Board of Directors. This is consistent with ATI’s announcement on February 28, 2011.

Mr. Harshman has been with the Company for 33 years. Prior to being named President and Chief Operating Officer in August 2010, he served as Executive Vice President, Finance and Chief Financial Officer since 2003; he

Continued on Page 4

Vladimir S. Moxson, Ph.D. Receives Honorary Doctor of Sciences Degree

Dr. Vladimir S. Moxson, Ph.D., President and CEO of ADMA Products Inc., was awarded the Honorary Doctor of Sciences degree by the Institute of Metal Physics of the National Academy of Science of Ukraine in recognition of Dr. Moxson’s achievements in the research and development of the hydrogenated titanium powder production process. ADMA Products Inc., founded by Dr. Moxson twenty six years ago, has grown from a solid state powder metallurgy consolidator of zirconium, niobium, nickel, titanium, and other advanced

Continued on Page 7

Titanium Industries Improves ERP Service

May 2011 -- In recent years Titanium Industries Inc. (www.titanium.com) has enjoyed rapid growth as a global manufacturing distributor of mill products, with 14 operations in North America, Asia, Latin America, India and Europe—the most recent being its Shanghai site, which opened in January. To capitalize on this ambitious global reach and better serve its customers, Ti Industries is ramping up an enterprise resource planning (ERP) system designed to link all of its locations—a strategic integration project that’s now underway.

Ti Industries is implementing an ERP system known as STRATIX, a module

Continued on Page 6

Dynamet Technology, Inc. Receives NSF Grant To Develop Critical Titanium Automotive Components

Dynamet Technology, Inc., Burlington, Massachusetts announced it has received a National Science Foundation Phase I SBIR (Small Business Innovative Research) Grant to develop Titanium Automotive Powertrain Components for Increased Fuel Efficiency and Reduced Emissions. The program will apply Dynamet’s advanced titanium powder metal manufacturing technology and its innovative wear resistant lightweight titanium alloys to create automotive powertrain components offering increased fuel efficiency. The principal investigator for this program will be
What’s New in Titanium?

West Penn Testing Says FAA Approval Will Move New Test Closer to Industry Acceptance

NEW KENSINGTON, PA-- West Penn Testing Group (www.westpenntesting.com), a provider of material testing services, is involved with a six-member group working to establish the equivalency of Phased-Array Ultrasonic Testing (PAUT) to the prevailing AMS-2628 standard. According to Albert Fletcher, General Manager, West Penn Testing, “With FAA acceptance of phased-array inspections, our group’s two-year effort will pass an important milestone. The 16-year-old AMS-2628 standard, which up till now has been the only one available with FAA approval, will soon be joined by an alternative testing technology accepted for inspecting rotor-grade titanium billets. PAUT has demonstrated that it can deliver equivalent levels of accuracy and reliability. It also offers the added benefit of significantly reducing the time required for setting up tests.”

Mark Pompe, Director of Technology and Level III at West Penn, said, “The AMS-2628 standard is based on multi-zone testing technology. Over the years, West Penn Testing has inspected more than 22 million pounds of rotor-grade titanium billets using the multi-zone approach. However, a number of years ago we began a program to convert a percentage of our ultrasonic testing capabilities to PAUT. It is inevitable that this technology, which holds out so much promise for aerospace OEMs, will soon be in wider use. PAUT is already well established in other manufacturing industry sectors, such as ground transportation, where it has proven its worth.”

For more information visit their website at www.westpenntesting.com.

Hughes-Loder Appointed Bluewater’s Commercial Administrative Manager

May 05, 2011 - Bridget Hughes-Loder has been appointed to the position of Commercial Administrative Manager for Bluewater Thermal Solutions. Terry Brown, Bluewater’s Director – Commercial states “Bridget’s strong work ethic and dedication to the Bluewater Team has made her an invaluable asset to Bluewater overall. Bridget has become the voice of Bluewater during the entire transition to our new brand as Bluewater Thermal Solutions.”

Bridget’s professional background includes risk management, sales, and administrative positions. Although hired as a temporary for Bluewater in Buffalo in March 2008, her dedication earned her a job transfer to Bluewater’s new Greenville, SC Corporate Headquarters. Bridget has an AAS Degree in Business Administration and Accounting as well as Certification as a Risk Manager.

Bluewater Thermal Solutions owns and operates 17 thermal processing facilities in the U.S. & Canada. Our facilities provide engineered solutions to manufacturers that require components and materials to be processed for improved strength, wear, or corrosion properties. Bluewater services the needs of the automotive, heavy equipment, aerospace and energy industries.

Specialty Metals Processing Now Offers Gantry Grinding Services

Specialty Metals Processing, centrally located in Stow, Ohio, is now offering Gantry Grinding services to the special metals industry. We now have the ability to grind/polish up to 12’ wide x 100’ long and up to 24” thick. This new grinding addition to our current wet vacuum chuck machines, not only allows us to grind oversized sheet & plate material, but material that may have flatness issues that could not be ground on vacuum chuck machines. The grinding head can handle any stainless, titanium, high temp or nickel alloy. With this new addition to our grinding department, there is not much SMP can’t handle in way of surface conditioning, grinding or polishing. We welcome all inquiries. Visit their website at www.specialtymetalspro.com.

About West Penn Testing Group -- Founded in 1952, West Penn Testing Group (WPT) offers an extensive array of independent non-destructive testing, chemical testing and material testing services. WPT serves customers in the metals, aerospace, nuclear, commercial manufacturing, military and automotive sectors. The company is headquartered in New Kensington, Penn., with operations in Pennsylvania and South Carolina. WPT is ISO-9001 and AS-9100 Registered. It is also A2LA ISO-17025 Accredited, Nadcap Accredited for ultrasonic, liquid-penetrant and magnetic-particle inspection, and is an FAA Repair Station for ultrasonic, eddy-current, liquid-penetrant and magnetic-particle inspections.
Are You Facing Big Decisions Involving Titanium Metal?

The market for titanium metal is global, and local events can make waves across the world. If you’re involved with titanium metal in any way, you know that everything’s important – both the small details and the big picture. A complete perspective is essential, whether you’re preparing a company strategy, planning exploration, bringing new products to market, buying, selling or investing.

Whatever your challenge, this report gives you deep insights to help you make really well-informed recommendations or decisions. Our clients include anyone with an interest in the evolving titanium metal market, anywhere in the world. Readers of past reports have come from a wide range of relevant industries – from extraction to end-use, from mines to factories to banks, from existing players to new entrants. And they range from analysts and researchers to operational managers and chief executives.

Order your report now at www.roskill.com/titanium-metal or call +44 20 8944 0066

Oxford Instruments and Verichek Technical Services form new strategic business alliance for OES instrument sales and service in the USA

This is to inform you that Oxford Instruments Americas, Inc. has entered in a business partnership with Verichek Technical Services, Inc. to provide you with the utmost excellence in sales, technical and service support for our optical emission spectrometer (OES) product line here in the USA. The instruments include the FOUNDRY-MASTER PRO, FOUNDRY-MASTER UV, FOUNDRY-MASTER COMPACT, ARC-MET, TEST-MASTER PRO and PMI-MASTER PRO.

Verichek Technical Services, Inc. has been supporting OES instruments for over 17 years, and has earned a reputation for providing both high quality and timely services to their customers. In addition, with their many years of expertise in optical emission spectroscopy, they will further enhance the customer experience with an in depth, knowledgeable sales staff ensuring the right instrument is chosen for the application. Effective from today, please contact Verichek Technical Services directly for all your OES product sales and service needs at the following:

Verichek Technical Services, Inc.
3000 Industrial Blvd
Bethel Park, PA 15102
Toll Free: 1-877-349-2649 * Phone: 412-655-3491
Fax: 412-655-3493
Email: sales@verichek.net * service@verichek.net

Dr. Anthony Walters, NSF Program Officer, indicated that the broader/commercial impact of the project will be reduced weight parts (particularly in reciprocating applications) at a lower cost than conventional titanium parts. Reducing the weight of specific reciprocating parts can allow weight reduction of other components as well as reduced bearing stress and friction. Mr. Glen Weber, Technical Specialist – Engine Metals for Ford Motor Company indicated that the Dynamet technology is compelling and with further development has a strong potential to contribute to the production of increasingly energy efficient vehicles.

Mr. Stanley Abkowitz, CEO of Dynamet Technology, stated that the Grant recognizes NSF appreciation of the importance of implementing near-term improvements in the efficiency of today’s combustion engine, enabling the automotive industry to continually increase its Government mandated CAFE requirements.

For further information contact info@dynamettechnology.com
began serving as CFO in 2000.

In addition, the Company announced a number of title changes reflecting the roles and responsibilities of executives reporting to Mr. Harshman:

- Hunter R. Dalton, 56 - Executive Vice President, Long Products and President, ATI Allvac
- Elliot S. Davis, 49 - Senior Vice President, General Counsel, Chief Compliance Officer and Corporate Secretary
- Terry L. Dunlap, 51 - Executive Vice President, Flat-Rolled Products and President, ATI Allegheny Ludlum
- Dan L. Greenfield, 60 - Vice President, Investor Relations and Corporate Communications
- David M. Hogan, 64 - Executive Vice President, Engineered Products Segment
- Carl R. Moulton, 63 - Senior Vice President, International
- Dale G. Reid, 55 - Executive Vice President, Finance and Chief Financial Officer. As CFO, Mr. Reid will lead ATI's strategic sourcing and information technologies shared services, and will chair the ATI corporate pension investment committee.
- John D. Sims, 51 - Executive Vice President, Primary Metals and Exotic Alloys and President, ATI Wah Chang

Also reporting to Mr. Harshman are Lauren S. McAndrews in her role as ATI's Vice President, Labor Relations; Mary Beth Moore, Vice President Human Resources; Phil Morton, Marketing, Communication and Brand Management Leader; and Darin Sarin, Project Manager Hot Rolling Processing Facility.

### Allegheny Technologies Completes Acquisition of Ladish

Allegheny Technologies Incorporated (NYSE:ATI) announced that it has completed its acquisition of Ladish Co., Inc. pursuant to the terms of an agreement and plan of merger adopted by Ladish shareholders at a special meeting held on May 6, 2011.

Under the terms of the agreement and plan of merger, each outstanding share of Ladish common stock has been converted into the right to receive $24.00 in cash and 0.4556 of a share of ATI common stock, with cash to be paid in lieu of fractional shares. More information on the exchange of Ladish shares for ATI shares will be mailed to former Ladish shareholders in the near future.

“We are pleased to have completed our acquisition of Ladish and welcome the highly experienced group of Ladish employees to ATI,” said Richard J. Harshman, Chairman, President and Chief Executive Officer of ATI. “ATI Ladish is now an operating company of our High Performance Metals segment, which also includes ATI Allvac and ATI Wah Chang.

“ATI Ladish adds to our capability to produce highly engineered and technically complex parts. We offer customers, particularly in the aerospace market, an integrated, stable, and sustainable supply chain, which now includes advanced forging, casting, and machining assets for titanium alloys, nickel-based superalloys and specialty alloys.”

“The Ladish team is excited to join ATI,” said Gary J. Vroman, President, ATI Ladish. “We believe this combination of complementary operations creates opportunities for us to contribute to ATI’s growth while continuing to be an important part of the communities in which we operate.”

Allegheny Technologies Incorporated is one of the largest and most diversified specialty metals producers in the world with revenues, including Ladish, of approximately $4.8 billion for the last twelve months. ATI has approximately 11,000 full-time employees world-wide who use innovative technologies to offer global markets a wide range of specialty metals solutions. Our major markets are aerospace and defense, oil and gas/chemical process industry, electrical energy, medical, automotive, food equipment and appliance, machine and cutting tools, and construction and mining. Our products include titanium and titanium alloys, nickel-based alloys and superalloys, grain-oriented electrical steel, stainless and specialty steels, zirconium, hafnium, niobium, tungsten materials, forgings, castings, and fabrication and machining capabilities. The Allegheny Technologies website is www.ATImetals.com.
What's New in Titanium?

MAKINO OFFERS THE NEW T2 5-AXIS HORIZONTAL MACHINING CENTER WITH ADVANTiGE™

Purpose-built with the rigidity, dynamic stiffness, vibration damping and agility necessary for highly efficient titanium machining

May 2011 – Makino offers the new T2 5-axis horizontal machining center with ADVANTiGE™ technology designed for mid-sized titanium aerospace part production. Its purpose-built design provides the rigidity, dynamic stiffness, vibration damping and agility necessary for more productive titanium machining and longer tool life.

“Makino’s ongoing titanium research and development continues to offer the most effective process solutions for a wide variety of today’s aerospace structural and engine components,” says Mark Larson, Makino’s Titanium Process R&D Manager. “Our latest solution, the T2 with ADVANTiGE technology, is like no other titanium machining center on the market today. Specifically designed from the ground up for high-efficiency titanium part production, it effectively reduces hazardous vibration and thermal conditions traditionally associated with titanium machining.”

The T2 provides X-, Y- and Z-axis travels of 2,000mm, 2,000mm and 1,800mm, respectively, allowing for part sizes up to 1900mm by 2000mm and 5,000kg. The T2’s construction features large way surfaces and table casting for extra rigidity and vibration damping, as well as a 120-position automatic tool changer (up to 190 available) for continuous, uninterrupted machining.

Rigid, High-Power Spindle
The T2’s HSK-A125 spindle is Makino’s most powerful spindle to date, delivering higher torque, horsepower and clamping force than all predecessors. Its compact design combines the latest induction motor with twin-inverter-drive technology for higher torque (740ft-lbs, 133HP continuous; 1,100ft-lbs, 200HP peak). The spindle is supported by roller bearings to ensure high rigidity, which keeps the energy loss to one-half that of conventional gear-driven spindles. The spindle delivers a maximum speed of 4,000 rpm. The A- and C-axes increase part accessibility with a ±110-degree A-axis rotation and a 360-degree continuous C-axis rotation.

Unattended Machining Capabilities
The T2 includes an automatic pallet changer system that features continuous operation and eliminates costly downtime for part changeovers with pallet change times of only 60 seconds.

This machine can also be integrated with an automatic pallet transfer and storage system in a highly flexible Makino Machining Complex (MMC) for extended periods of unattended operation. This automation system assigns work and initiates operations automatically, maximizing spindle utilization for increased productivity.

Schedule a Visit
The T2 5-axis horizontal machining center with ADVANTiGE technology is currently on display at Makino’s Global Titanium R&D Center. Call 1-800-522-3288 to schedule an appointment to see this technology in action.

About Makino - A world leader in advanced CNC machining centers, Makino provides a wide range of high-precision metal-cutting and EDM machinery, including horizontal machining centers, vertical machining centers, 5-axis machining centers, graphite machining centers, and wire and Ram EDMs. Our flexible automation solutions provide reduced labor costs and increased throughput in a variety of production volumes and designs. With Makino engineering services, we offer industry-leading expertise for even the most challenging applications across all industries. For more information, call 1-800-552-3288 or visit www.makino.com

All New! How to Weld Titanium DVD is now available

Provides instructions on the correct welding equipment and work area needed for a successful titanium weld, proper joint design, anti-contamination procedures, how to evaluate procedures and techniques. Excellent demonstrations provided by Edison Welding Institute taken from their weld rooms. 32 minutes in length.

Members: $45.00 U.S. Non Members: $69.00 U.S.
What’s New in Titanium?

Titanium Industries
Continued From Page 1

in the STRATIX database is called INVEX from metal industry software specialist Invera Corp., Houston (www.invera.com). Invex offers a full suite of interactive functions for an integrated metal service center and its customers.

Brett Paddock, President and CEO stated, “Our goal is to provide industry leading customer centric systems to our global partners as we continue to expand both our domestic and international market presence. This project is another example of Titanium Industries commitment to exceed our customers increasing quality and service expectations.”

For customers doing business with the Rockaway, NJ-based company, the STRATIX ERP capability will provide a consistent platform for accessing and generating critical documents on a 24/7 basis. It will give customers a window to track orders, monitor supply-chain information and provide a history of previous transactions. For Ti Industries, it will enable the company to streamline its operations, track inventory levels at its various facilities to accommodate customer needs, and provide a consistent, familiar “store front” for clients around the globe.

According to information from Invera, shipment information and test certificates can be viewed online with INVEX once an order leaves the service center. This information allows customers, outside sales reps and customer service staff to access their requests at their own convenience. INVEX employs a role-based access and security to guard customer information. Ti Industries’ STRATIX current operates in English and French; going forward, the company intends to bring other languages into the system to accommodate it other operations.

Bob Valerie, Ti Industries Project Manager and the point person on this effort, said the ERP system rollout began two years ago and in the future will provide Ti Industries’ customers with online information for order status, inventory management, certification management, multi-step production, delivery and logistics planning, invoicing and financials.

“(The ERP implementation) is a big deal as it ties us together globally,” Valerie explained. In essence, he said the ERP system’s most valuable capability is customer relationship management, offering a comfort level for doing business online or through personal contact. “This has been a work in progress for a number of years,” Valerie said. “The operating system that we migrated from was becoming dated and was not readily functional for our international locations.

“We’re a service center,” Valerie continued. “The ERP system will give our customers consistency and convenience when doing business with us.” He compared it to the inherent marketing value of the brand recognition associated with major international chains, where loyal customers have an expectation of service, product quality and a consistent, recognizable menu of offerings.

Mary Moynihan-Downes, Ti Industries’ advertising manager, said the ERP system gives customers the ability to generate documents such as releases, invoices, shipping manifests, certifications, engineering specifications and industry compliance forms. It also offers assurance as to when an order will ship and when it will arrive. “This is huge,” she said. “It gives customers the accessibility to plan better. If they’re working late or from another time zone, they have the ability to go into our system and view the status of existing orders, or look at their inventory history with us.”

Ti Industries’ locations employing the ERP system will be connected to a common network and database. Moynihan-Downes said support the ERP system was a main thrust for the company’s recently re-engineered Web site. She served as the point person on the Web site project. The company’s Web site will provide a gateway to the INVEX ERP system.

Ti Industries is a global manufacturing distributor of titanium, nickel-based products and other high-performance metals. Founded in 1972, the company has 14 facilities around the world serving the aerospace, medical and general industrial markets. Committed to exceeding customer requirements and reducing cycle times, the company provides a wide range of value-added services including grinding; laser, torch, saw and water-jet cutting; and milling. In addition, Ti Industries can subcontract a variety of metal fabrication operations.
What’s New in Titanium?

ADMA
Continued From Page 1

material products, to a company that also produces titanium powder for the manufacture of components for the most critical aerospace and military applications. Dr. Moxson’s advances and patented processes for hydrogenated titanium powder production have opened the door to titanium products that not only exceed ASTM, and the more stringent AMS and Military specifications, but which exceed the properties of conventional ingot metallurgy processes at a small fraction of conventional cost.

The Honorary Degree was presented to Dr. Moxson on April 29, 2011 in Kiev, Ukraine.

ADMA Products Inc. is a manufacturer of net shape and near net shape powder metallurgy products from titanium, zirconium, niobium, other advanced materials, and their alloys. These products meet all critical specifications and standards. ADMA has been a producer of high specification/low cost hydrogenated titanium powder since 2007 and is currently in the process of upscaling that production in the USA to meet increasing defense, aerospace, medical, transportation and energy sector demand. For more information visit their website at www.admaproducts.com.

Solar Atmospheres Hires New Marketing Manager, Laura Edwards

Souderton, PA - Laura Edwards recently joined Solar Atmospheres as Marketing Manager. Her focus is on providing strategic directions for all of Solar’s marketing activities, such as corporate branding and communications; advertising; website development; tradeshows; public relations and social media. Ms. Edwards has over 20 years of experience in business-to-business Marketing. In addition to freelance consulting, she has worked with a variety of marketing agencies and business. “Laura brings a wealth of knowledge in the marketing field to this position and has a great amount of experience. We are excited to see what Laura will do to help Solar Atmospheres,” states Roger Jones, Corporate President.

Ms. Edwards serves as Vice President of Publicity for the Women’s Referral Network of Montgomery County and co-teaches a leadership program in conjunction with Pearl S. Buck International. She is a double graduate of Penn State University with a B.S. in Marketing and a Masters in Business Administration.

ABOUT SOLAR ATMOSPHERES:
Solar Atmospheres is the world’s largest provider of commercial vacuum heat treating services. Through unmatched technical expertise, equipment, and quality assurance, Solar’s thermal processing produces bright, scale-free parts with minimal distortion. For clients requiring an “out-of-the ordinary” application, an in-house R&D team of metallurgists and scientists develop innovative, custom process solutions. Serving over 18 markets, Solar’s state-of-the art services include brazing, carburizing and nitriding. With over 50 furnaces ranging from lab sized to the world’s largest commercial vacuum furnace, Solar can efficiently handle any size job. Headquartered near Philadelphia, Solar also operates plants near Pittsburgh and in Fontana, California. Please visit www.solaratm.com for more information.

Bodycote Rancho Dominguez Completes Installation of 7th Vacuum Furnace

Bodycote has recently completed the installation of a seventh vacuum furnace at its Rancho Dominguez facility in Southern California to meet increased demand as a number of civil and military aerospace programs transition from development to production. This expansion is part of Bodycote’s larger global expansion of its portfolio to meet the increased demands of the aerospace, defence, and energy sectors. Matthew Alty (Technical Sales Manager) said “vacuum related sales have remained resilient throughout the economic downturn and it is essential that we now install additional capacity. We have worked closely with a number of customers to better understand their heat treatment requirements for new programs such as 787 and F-35. This has allowed us to determine the size and capability of this furnace and future installations on the West Coast.” The new 60” furnace will be primarily used to heat treat titanium and nickel base components, the furnace will have an operating range of 900°F to 2200°F and a load capacity of 4,000lbs.

For further information please contact Dave Ochar (Regional Sales Manager) at dave.ochar@bodycote.com
TITANIUM 2011 will be held this October 2-5th at the Sheraton San Diego Hotel & Marina. A full agenda, speaker abstracts, and registration details are located at www.titanium.org. You will not want to miss this year’s event!

Over the past decade, attendance at the TITANIUM Conference has doubled, drawing delegates from more than 30 countries over the past two years. This growth has occurred as the supply chain for many industries has become more active. This year we are expecting between 700-1,000 delegates.

Many managers from prime contractors as well as sub-tier suppliers are coming to the annual event as they recognize the efficiency of attending a meeting such as TITANIUM. Because there are producers, distributors and fabricators from all parts of the world across several consuming market segments at the conference, it is a very cost effective means for the delegates to meet with a wide variety of customers and vendors in a single trip. At the same time, the TITANIUM Conference offers the only opportunity to hear from leading industry executives and attend panel discussions on market topics that affect each industry segment, all in one place.

TITANIUM 2011 is designed to suit the needs of titanium industry professionals, suppliers, customers and stakeholders. Attendees typically hold executive positions in areas such as management, sales and marketing, product development, production, engineering and design, purchasing and quality control.

The industry is poised for recovery and the 2011 meeting will present an excellent forum for discussion on the prospects for the future. Each year a wealth of information is presented and shared through a variety of presentations, forums and exhibits. TITANIUM 2011 will be no exception.

On Line Registration: www.titanium.org  Tel: 303-404-2221
NOTE: ALL Housing Reservations for the Conference Hotel must be booked through the ITA Website. Any organizations soliciting attendees for the upcoming event could be fraudulent and are not affiliated with the ITA.

TITANIUM 2011 Conference

TITANIUM 2011 Information Now Online

Complete conference details are now available on the ITA website.

The General Session Panels that will be presented are listed below.

<table>
<thead>
<tr>
<th>INDUSTRY-SPECIFIC PANELS</th>
<th>Sponsor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aerospace Materials &amp; Processes</td>
<td>TIMET</td>
</tr>
<tr>
<td>Automotive</td>
<td>Airbus</td>
</tr>
<tr>
<td>Commercial Aerospace</td>
<td>ATI Aeronautics</td>
</tr>
<tr>
<td>Economics</td>
<td>VSMPO Avísm</td>
</tr>
<tr>
<td>Energy Exploration &amp; Production</td>
<td>60</td>
</tr>
<tr>
<td>Industrial Markets</td>
<td>uniti</td>
</tr>
<tr>
<td>Machining</td>
<td>DSI</td>
</tr>
<tr>
<td>Machining and Tooling</td>
<td>ATI Engineering Products</td>
</tr>
</tbody>
</table>

INDUSTRY-SPECIFIC PANELS
Manufaturing Technology | 60
Medical Applications | 60
Military / Defense | TIMET
New Manufacturing | GE Additive
State of Industry in China | 60
Supply Chain Management | EWI
Welding of Titanium |

SUPPLEMENTAL PRESENTATIONS INCLUDE
World Industry Supply Trends | TIMET
World Industry Demand Trends |
The Evolution of Supply-Chain Security for Critical Materials to Support the Defense Industrial Base |
Powder Metallurgy |
Manufacturing Techniques |
Consumer Markets |

DISTINGUISHED SPEAKER
John P. Byrne  
Director of Common Commodities Sponsor Management  
Boeing Commercial Airplanes  
Tuesday, October 4th

John P. Byrne serves as Director of Common Commodities for Boeing Commercial Airplanes’ Supplier Management. In this position, he is responsible for strategic development, contracting and supplier management of the metallic and composite raw materials, fabricated parts and assemblies, forgings/castings and structural standards. John also serves the key role of linking Supplier Management with the company’s Fabrication Division. In 2001, John was named Director of the Machine Parts Manufacturing Business unit, which produced complex machined parts and assemblies for Boeing single- and twin-aisle commercial airplanes. John’s next assignment was the director of Business Operations and Supply Chain Management for the Fabrication Division of Boeing Commercial Airplanes. His responsibilities included business and strategic planning, work statement control and coordination of supply chain and work placement activities for all of the division’s fabrication sites in the United States and Canada. He was named to his current position in the spring of 2003.

KEYNOTE ADDRESS
David Houle  
Futurist, Advisor and Speaker  
Wednesday, October 5th

David Houle is a futurist, advisor and speaker. He has always been slightly ahead the curve. Houle spent more than 20 years in media and entertainment. He has worked at NBC, CBS and was part of the senior executive team that created and launched MTV, Nickelodeon, VH1 and CNN Headline News. Houle has won a number of awards. He won two Emmys as Co-Executive Producer for a nationally syndicated kids program, “Energy Express”. He won the prestigious George Foster Peabody award and the Heartland award for “Hank Aaron: Chasing the Dream” and was nominated for an Academy Award. Houle is consistently ranked as one of the top futurists and futurist keynote speakers on the major search engines. He has keynoted numerous conferences both across the country and internationally. Called “the emerging futurist in the world today”. He won a speaker of the year award from Vistage International, the leading organization of CEOs in the world. He is often called “the CEOs’ Futurist” having spoken to or advised 1,800+ CEOs and business owners in the past three years. In February 2010 he also became a featured contributor to Oprah.com and his column can be found at www.oprah.com/davidhoule.
Educational Workshops

Upcoming Fundamentals of Titanium Workshops

For over ten years, the International Titanium Association (ITA) has presented the premier course on everything Titanium.

This comprehensive workshop has been presented all over the world and in several languages. Now, for the first time, this course is available online. This comprehensive workshop provides detailed information on the types, uses, and properties of common titanium alloys. You will gain an understanding of applied titanium metallurgy fundamentals.

Course Objectives & Content Fundamentals of Titanium will prepare you to present and work effectively with job-related functions that involve titanium. You will receive a complete overview of titanium and a thorough grounding in its metallurgy, characteristics, properties and uses.

Typical Course Outline:
- Historical Overview Of Titanium
- Titanium Characteristics
- Comparisons With Other Metals
- Titanium Manufacturing
- Titanium Alloys
- Heat Treating
- Corrosion Resistance
- Mechanical Properties
- Joining
- Forming
- Finishing
- Safety
- Recent Technology Advances
- Current And Emerging Applications

To register for the workshop, please visit the ITA website at: http://titanium.org/Category.cfm?CategoryID=9.

Upcoming Fundamentals Schedule:
- Tuesday, July 12th
  Lyon, France
- Sunday, October 2nd
  San Diego, California
- Tuesday, October 25th
  Pittsburgh, PA

Welding of Titanium Workshop

Any individuals wishing to learn how to weld titanium correctly or wishing to learn how to weld titanium more effectively will benefit from this workshop.

Techniques will be discussed unique to titanium not readily apparent in other metal joining. The course will discuss various forms of titanium joining like Electron Beam, Laser, MIG, TIG and Plasma. Primary focus will be on the GTAW (Gas Tungsten Arc Welding) or Tungsten Inert Gas (TIG) method for joining titanium.

Individuals will also learn to deal with the challenges of everyday fabrication in the true shop environment. Titanium can and is welded every day in the open shop environment for the most stringent and critical applications and you can too.

Welding of Titanium offers 5 hours of classroom study and 3 hour hands-on exercises will follow for a full day workshop.

Course Content:
- Titanium History & Background
- Characteristics – What is important for welding
- General Manufacturing/Welding Processes Used
- Joining (including):
  - Weldable Materials and Filler Materials
  - Preparation for welding, cutting and cleaning
  - Equipment to use, how to set it up
  - Correct Titanium Techniques
  - Welding practice
  - Post Welding Issues
  - Metallography
  - Quality Control, WPQR and WPS
  - Stress Relieving
  - Safety

Upcoming Welding of Titanium Schedule:
- Wednesday, August 31st
  Columbus, OH
Material For Sale:

**TITANIUM MILL PRODUCTS & TITANIUM SCRAP FOR SALE**

California Titanium, LLC
***Sales: titanium mill products for sale; specializing in industrial applications.

***Consulting: we provide consulting for companies and buyers seeking to do business with Chinese manufacturers; fluent in English and Mandarin (Chinese).

Contact us for product inquiries:
California Titanium, LLC, Redondo Beach, California
Tel: (310) 683-8004
Fax: (310) 543-2138
sales@caltitanium.com
www.caltitanium.com

As ISO and PED Certified company, Jiangsu Hongbao Group Co., Ltd specializes in manufacturing titanium rod, tube, plate and wire. Our products are widely used in heat exchangers, petrol-chemical industry, aviation industry and sports appliances.

Our manufacturing capability as follows:


2. Titanium and its alloy rods ASTM B 348, F 67 Diameter: 10-150mm

3. Titanium and its alloy sheets & plates ASTM B 265, F 67 Thickness: 0.7-50mm Width: <2500mm Length: <6000mm.

4. Titanium and its alloy wire according to ASTM B 863 Diameter: 0.4mm-10mm

David Dai, Jiangsu Hongbao Group Co. Ltd.
Phone: 86-512-58715259 * Fax: 86-512-58715267
Email:foreigntrade@hongbao.com

We can offer you titanium products, nickel based alloy products and some other special stainless steel from the stock. Here is part of our stock list, please check and see whether there are some items which you need.

Gr.5 1.8*1000*2000mm 2195kg/137pcs ASNA 3200E
Gr.5 1.6*914.4*2438181kg/11pcs MIL-T-9046J/AMS 4911H/DMS1592F/ASTM B265
Gr.5 1.8*914.4*2438 692kg/38pcs MIL-T-9046J/AMS 4911H/DMS1592F/ASTM B265
Gr.5 1.8*914.4*3048 136kg/6pcs MIL-T-9046J/AMS 4911H/DMS1592F/ASTM B265
Gr.5 2.03*914.4*2438 992kg/50pcs MIL-T-9046J/AMS 4911H/DMS1592F/ASTM B265
Gr.5 2.03*914.4*3048 537kg/21pcs MIL-T-9046J/AMS 4911H/DMS1592F/ASTM B265
Gr.5 2.286*914.4*2438 639kg MIL-T-9046J/AMS 4911H/DMS1592F/ASTM B265
Gr.5 2.286*914.4*3048 529kg/18pcs MIL-T-9046J/AMS 4911H/DMS1592F/ASTM B265
Gr.5 6.35*914.4*2438 241kg/3pcs MIL-T-9046J/AMS 4911H/DMS1592F/ASTM B265
Gr.5 0.813*914.4*2438 750kg MIL-T-9046J/AMS 4911H/
Classified Ads

DMS1592F/ASTM B265
Gr.5 0.813*914.4*460kgs MIL-T-9046J/AMS 4911H/
DMS1592F/ASTM B265
Gr.5 1.27*914.4*500kgs MIL-T-9046J/AMS 4911H/
DMS1592F/ASTM B265
Gr.5 1.27*914.4*3048 342kgs MIL-T-9046J/AMS 4911H/
DMS1592F/ASTM B265

For more information, please visit our website www.timetas.com. We can offer our customers a very competitive price and a very fast delivery.

Contact Information:
Celia Qi, the international business manager of Tianjin Hengtai Industry and Trade Co., Ltd., No.21 Quanfa Road, Wuqing development zone, Tianjin, China
Tel: 0086-22-82173366 * Fax: 0086-22-82101337
Mobile: 0086-15900351445
Email: timetals.qi@gmail.com * Web: http://www.timetas.com

Hailong Industry manufactures Seamless Titanium and Titanium Alloy tube and pipe as per SB338 and SB861, with the material of Gr.1, Gr.2, Gr.7, Gr.9, Gr.12, Nickel and Nickel Alloy tube and Pipe, Ni201, Monel400, Incoloy 600, 625, Inconel 800, 825, Stainless steel tube and pipe, duplex tube etc. The company was ISO and PED certified by TUV.

Contact Information: www.hailongtitan.com
Tel: 0086-512-58986900, Fax: 0086-512-58183187,
Email Address: hailonggood@163.com

Trans World Alloys makes and stocks any size Titanium Plate Grade 5

Material: Titanium
Form: Plate
Grade: 6AL 4V, Grade 5
Thickness: .250” – 4.0”
Available sizes: Cut to size or full plate or oversized
Certs: Mill
Manufacture: Domestic
Specification: AMS 4911, MILT 9046, AMST 9046
**Short lead time**

Trans World Alloys is a, full service ISO 9001:2008 & AS 9100 certified distributor of Titanium, aluminum and various other high-temperature alloys. We specialize in titanium 6-4, 6-6-2, 6-2-4-2, 15-3-3-3, 8-1-1, 8MN, and CP alloys in sheet, plate, bar, rod, tube and forgings. Our titanium forged-to-size billets, slabs and custom blocks can be made or cut to your specific size requirements. We also carry hard-to-find, extra-wide and extra-long sheet and plate. We offer value added services such as “Resale Consignment” and “Scrap Buy-Back” Programs.

Trans World Alloys, 249 E. Gardena Blvd. Gardena CA, 90248
Phone: +310-217-8777 Fax: 310-217-0066
Website: http://twalloys.com * Email: sales@twalloys.com

Job Posting:

Conversion Manager

Conversion Manager needed for VSMPO-Tirus, US to oversee conversion of slab to coil and welded tube. Duties include:
• Logistical coordination with parent company for slab supply and welded tube conversion, including import / export requirements
• Oversight of slab preparation, rolling, and scrap collection at several processors in the United States
• Responsible for inventory control, on-time delivery, quality and yield
• Activities include regular conference calls with parent company, negotiations and tracking with subcontract vendors, regular reporting of results, business planning and forecasting.
• Some international travel required.

Requirements: Bachelor’s degree in metallurgy, 10 – 15 years production experience in specialty metals, logistics experience in metals industry, purchasing experience in metals industry – preferably conversion services
Location: Pittsburgh, PA area.
Send Resume to: humanresources@vsmpo-tirus.com

Director – Product Management position

Expansion into wire product manufacturing creates opportunity for a Director – Product Management position at VSMPO – Tirus, US. The position is focused on developing marketing strategy for domestically manufactured titanium product used by VSMPO – Tirus sales and distribution to service customer needs. Product responsibilities will include bar, billet, and wire in coils and straight lengths for aerospace, medical, automotive, and other applications. Strategy includes pricing, inventory stock positions, and customer qualification procedures (where necessary) needed to achieve timely new product launch and target growth. In addition, price and volume forecasting and development of purchasing requirements are part of the position description. Negotiation of material price and delivery with third party vendors will also be required.

Requirements: 4 year college degree – technical degree preferred (graduate degree desirable). 10 - 15 years experience in sales / marketing of specialty metal long products – titanium experience preferred. Location: Pittsburgh, PA area.

Contact: humanresources@vsmpo-tirus.com
RTI International Metals is a leading U.S. producer of titanium mill products and fabricated metal components for the global market. Through its various subsidiaries, RTI manufactures and distributes titanium and specialty metal mill products, extruded shapes, formed parts and engineered systems for aerospace, industrial, defense, energy, chemical and consumer applications for customers around the world.

Quality Assurance Manager

This position manages, plans, coordinates, and directs the quality assurance program within established standards to ensure the prevention and/or elimination of defects in new or existing products or processes by performing the following duties personally or through subordinate supervisors.

- Fully responsible for all aspects of the QMS and compliance to customer, industry, and regulatory requirements, including ISO/AS/NADCAP.
- Administers local audit program by performing internal audits and/or guiding internal auditors, including supplier audits, and 3rd party auditors.
- Collaborates with top management to establish Business Unit policies, procedures, key performance metrics, and goals.
- Leads review of technical problems and promotes a Continuous Improvement mindset and culture for Quality Management.
- Visits and confers with representatives of material and component vendors to obtain information related to supply quality, capacity of vendor to meet orders, and vendor quality standards.
- Supports engineering team regarding quality assurance of new product designs and manufactured products on market to rectify problems.
- Administer local corrective action system, QMS document control system, and support new hire quality training requirements and competency evaluations for all employees.
- Communicates Quality Philosophy across the organization.
- Represents RTI to customers in matters relating to product or process quality.

Requirements: Bachelor’s Degree in related area such as Engineering, Operation Research, etc., combined with 5+ years of related experience as a Quality Manager; equivalent combination of education and experience will be considered. A strong background and knowledge of applicable quality requirements, specifically ISO 9001, AS 9100 AB, and lead auditor experience is required. Proven management and leadership skills are essential with strong written and oral communication skills are required. The ability to effectively communicate to all audiences (i.e., subordinates, peers, executives, customers, external auditors) is required. Six Sigma Black Belt preferred. Strong problem solving and analytical skills are essential for identifying and resolving problems and implementing corrective action. Must be proficient in Microsoft Access, Excel and Word applications, statistical analysis programs (Minitab) and have a working knowledge of SAP. Ability to travel as job requires is a must.

RTI International Metals, Inc. is opening a new facility in Martinsville, Virginia. This position will be part of the start-up team. A competitive salary and excellent benefits in a team environment await the successful applicant. Qualified candidates may submit their profile on-line at http://rtiintl.com/job-postings.html requisition # RPRD140. RTI International Metals, Inc. is an Equal Opportunity Employer (M/F/H/V)

Chief Metallurgist

Position Summary: Reporting to the General Manager RTI Martinsville, the Process Control Manager is responsible for ensuring effective and efficient engineering services are in place to satisfy the requirements of both internal and external customers by planning and directing a quality control program designed to ensure continuous production/service consistent with established standards.

Job Duties / Responsibilities

- Formulates and maintains quality control objectives, and coordinates objectives with production procedures in cooperation with other managers and departments to maximize quality and reliability while minimizing costs.
- Manages the development and analysis of statistical data and processing specifications to determine present standards and establish proposed quality and reliability expectancy.
- Performs all the duties associated with managing the daily activities of the Metallurgical Laboratory, Process Engineers, Continuous Improvement and Inspection Departments.
- Develops, implements and coordinates product quality control procedures and specifications.
- Ensure that all quality procedures are being followed to produce a quality product based on the customer specifications.
- Administer local audit program by performing internal audits and/or guiding internal auditors during audits, including outside suppliers.
- Visits and confers with representatives of material and component vendors to obtain information related to supply quality, capacity of vendor to meet orders, and vendor quality standards.
- Confers with engineers about quality control of new product design and manufactured products on market to rectify problems.
- Administers local audit program by performing internal audits and/or guiding internal auditors, including supplier audits, and 3rd party auditors.
- Reviews and approves purchase requisition for outside material and component vendors.
- Conducts quality audits of components to ensure all certifications properly reflect the processes performed.
- Interprets quality control philosophy to key personnel in organization.
- Responsible for continuous evaluation of existing inspection methods and procedures and implementing improvements.
- Reviews and approves all shipping documents and certificates of conformance to ensure all certifications properly reflect the processes performed.
- Reviews and approves purchase requisition for outside material processing to ensure all customer requirements are addressed and met.
- Travels to other facilities and participates in quality audits.
- Other duties as assigned.

Basic Qualifications / Requirements

- Strong background and knowledge of applicable quality requirements, specifically ISO 9001, AS9100 and NADCAP.
- The ability to effectively communicate both written and orally...
to all audiences (i.e., subordinates, peers, executives, customers, external auditors) is required.

- Six Sigma Black Belt preferred.
- Strong problem solving and analytical skills are essential for identifying and resolving problems and implementing corrective action.
- Ability to travel as job requires.
- Five to ten years related experience as a Quality Manager in a manufacturing environment.
- Bachelor’s degree in Metallurgy or Material Science. Masters Degree preferred.
- Expertise in managing a diverse set of disciplines including Engineering, Continuous Improvement and Lean Manufacturing concepts.
- Project management skills and experience managing multiple projects simultaneously. • Proven track record in managing and growing successful teams.
- Excellent organizational and strong leadership skills.
- Proficient with Microsoft Office products including Word, Excel, PowerPoint and Outlook. SAP and Minitab experience a plus.

RTI International Metals, Inc. is opening a new facility in Martinsville, Virginia. This position will be part of the start-up team. A competitive salary and excellent benefits in a team environment await the successful applicant. Qualified candidates may submit their profile on-line at http://rtiintl.com/job-postings.html requisition # RPRD172. RTI International Metals, Inc. is an Equal Opportunity Employer (M/F/H/V)

Corporate Process Control / Lean Specialist, RTI International Metals

The Process Control / Lean Specialist will be focused on the development of robust manufacturing processes for key product lines (existing as well as new) at RTI business units. This role will be defined by the following functional responsibilities:

1. Maintain regular communication with Engineering, Quality and Operations Managers at Business Units to understand manufacturing process issues that impact BU profitability or customer satisfaction.

2. In conjunction with BU, participate in / lead problem solving exercises where near-term resolution of issues is required. Leverage the solution of near term issues to implement robust corrective actions using Six Sigma methodology. Institutionalize changes by securing buy-in from all stakeholders (equipment operators, BU Engineering / Operations management, Commercial, Customers, Supply Chain …) and effective follow-through.

3. Identify critical process parameters for key manufacturing operations and other process inputs to establish process capability improvement initiative. Validate process control plans through quantitative correlation of process output to process parameters and articulation of physical mechanisms behind the correlation. At all times, follow well-established change implementation best practices and Six Sigma methodologies to minimize risk (e.g. through FMEA etc.).

4. Where lacking, develop metrics for tracking effectiveness of process control plans. In conjunction with other functional groups (e.g. accounting, IT, BU operations …), develop mechanisms for monitoring the metrics. Ensure that local functional groups (e.g. engineering) have full visibility to the metrics.

5. Support achievement of RPS standards as defined by the certification matrix, primarily focused on the process management and continuous improvement sections. Mentor BU process engineers to implement RTI Production System segment for process management.

6. Understand product cost drivers in sufficient detail to identify opportunities for cost reduction through elimination of waste. Work closely with CI / other groups to realize cost reduction opportunities through the execution of lean initiatives. Partner with BU’s to generate transformation plans to achieve

Operational business requirements and support their implementation.

1. Bachelor’s degree in Mechanical or Industrial Engineering. Graduate degree highly preferred.

2. Minimum of 3 years in a functional engineering role (design / process engineering) in heavy metal manufacturing industry. Front line operations / supervisory experience in similar industry a distinct plus.

3. Minimum of additional 3 years in a continuous improvement role with demonstrated ability to effectively use lean tools.

4. Objective and dispassionate problem solving track record. Experience with six sigma methodologies highly desirable.

5. Understand specific characteristics of equipment used in the manufacturing process and the limits of their capability (e.g. range of motion, range of tonnage, range of speeds, physical dimensions, clearances, rigidity, access to work handling equipment, maintenance requirements, failure modes …). Strong consciousness of safety implications when reviewing manufacturing processes and implementing change.

6. Experience with ERP systems (SAP / Oracle) a plus.

7. U. S. Citizenship / Permanent Residency (Green Card) required.

8. Total team player. Ability to work with multiple groups with diverse backgrounds and viewpoints and stay focused by using structured methodologies to achieve the final desired outcome.

The following specific qualifications are required to support the different business units (experience in one or more areas required):

9. Experience with different melt processes, preferably Titanium (e.g. Plasma / EB hearth melting, VAR) and related equipment characteristics.


11. Tooling design / fabrication to support metal manufacturing processes such as extrusion / forging / sheet metal forming / machining / welding.

12. Sheet metal forming (hot forming, SPF, explosive forming etc.), preferably titanium. Aluminum / steel will be considered. Knowledge of related equipment capabilities.

Email resume to emabie@rtiintl.com
Key Account Manager

Reporting to a Key Account Director, this position is responsible for developing and maintaining business relationships with key accounts/markets and implementing sales tactics to ensure growth across the RTI enterprise.

• Develop business plans that ensure RTI meets its revenue and market share growth targets.
• Collaborate with business units to develop the delivery of business plans for key accounts aligned with the overall strategic plan.
• Develop and maintain relationships with decision makers of key accounts.
• Identify and target new business opportunities to include applications or customer areas not currently supplied by RTI.
• Prepare forecasts, variance reports, and updates, including areas of opportunity as well as threats/risks.

Required
• Bachelor’s degree in a technical/business related field.
• 3+ years of sales/marketing experience.
• Demonstrated problem solving skills necessary to deal with volatile, rapidly changing markets.
• Success implementing innovative and creative ideas.
• Strong negotiation and commercial skills.
• A track record of growth in key accounts/markets.
• Willingness to travel 40-50%

Preferred Experience in metals market and aerospace/defense industry is preferred.

Contact Elizabeth Mabie, Manager, Corporate HR, RTI International Metals, Phone: 412-893-0037

Expansion at Dynamet Technology in development and production of its advanced titanium powder metal materials and components is creating staff positions for additional metallurgical engineering and technician staff. A powder metal background and/or a titanium research and manufacturing background is desirable. Exceptional capability in writing technical reports and compelling research and development proposals is a requirement for engineering and science positions.

Individual creativity with team work interest would be a good combination.

Send brief resume to: mabkowitz@dynamettechnology.com

Material Wanted:

TI 8-1-1 (Titanium Plate) AMS4916

.250” or thicker in plate or flat bar (very flexible with dimensions).
400 lbs.
Material must be DFARS.

Please contact Szollia Thomas, Purchasing Department, TransWorld Alloys
Email: sthomas@twalloys.com
Tel: (800) 258-8180

ITA Members are welcome to post Classified Ads FREE. Please email sblicker@titanium.org

For their excess prime certified titanium, superalloys, specialty steel and aluminum alloy mill products. Direct Alloys helps mills, forgers, machine shops, fabricators, distributors and end-users sell and locate forging stock, machining bar, wire, plate and sheet inventories. We provide the link between short term material supply and demand, saving purchasers and suppliers precious time, energy and capital resources.

Direct Alloys concentrates on premium materials, and represents the seller in transactions, providing a unique knowledge based service with over 25 years experience in the specialty metals industry. Our online database and advanced sales tools located at www.directalloys.com offer a dynamic value-added service for suppliers and consumers of high performance metals.

Register for our free industry news email updates!

Direct Alloys LLC, 901 Broad Street, Utica, NY 13501
sales@directalloys.com * www.directalloys.com

Supply of Peeling and other Cold Finishing Equipment for Titanium Processing.

Danieli Centro Maskin, the cold finishing division of the multinational DANIELI group, design and manufacture a wide range of equipment that cover the processes of peeling, drawing, cut to length, straightening, chamfering, packaging and all associated equipment.

Enquiries for individual machines and/or complete cold finishing plants are welcome.
For USA enquiries contact Danieli Corporation USA (Bob Smith Tel: (724) 778 5448; r.smith@danielicorp.com). For all other enquiries contact Danieli headquarters in Italy (Kristiaan van Teutem , Tel: +39 04321957295; k.vanteutem@danieli.it)

Material Wanted:

ONLINE TITANIUM AND SPECIALTY METALS CLEARINGHOUSE – www.directalloys.com

Manufacturers now have access to a dedicated online clearinghouse for their excess prime certified titanium, superalloys, specialty steel and aluminum alloy mill products. Direct Alloys helps mills, forgers, machine shops, fabricators, distributors and end-users sell and locate forging stock, machining bar, wire, plate and sheet inventories. We provide the link between short term material supply and demand, saving purchasers and suppliers precious time, energy and capital resources.

Direct Alloys concentrates on premium materials, and represents the seller in transactions, providing a unique knowledge based service with over 25 years experience in the specialty metals industry. Our online database and advanced sales tools located at www.directalloys.com offer a dynamic value-added service for suppliers and consumers of high performance metals.

Register for our free industry news email updates!

Direct Alloys LLC, 901 Broad Street, Utica, NY 13501
sales@directalloys.com * www.directalloys.com

Services:

Expansıon at Dynamet Technology in development and production of its advanced titanium powder metal materials and components is creating staff positions for additional metallurgical engineering and technician staff. A powder metal background and/or a titanium research and manufacturing background is desirable. Exceptional capability in writing technical reports and compelling research and development proposals is a requirement for engineering and science positions.

Individual creativity with team work interest would be a good combination.

Send brief resume to: mabkowitz@dynamettechnology.com

Material Wanted:

TI 8-1-1 (Titanium Plate) AMS4916

.250” or thicker in plate or flat bar (very flexible with dimensions).
400 lbs.
Material must be DFARS.

Please contact Szollia Thomas, Purchasing Department, TransWorld Alloys
Email: sthomas@twalloys.com
Tel: (800) 258-8180

ITA Members are welcome to post Classified Ads FREE. Please email sblicker@titanium.org

For their excess prime certified titanium, superalloys, specialty steel and aluminum alloy mill products. Direct Alloys helps mills, forgers, machine shops, fabricators, distributors and end-users sell and locate forging stock, machining bar, wire, plate and sheet inventories. We provide the link between short term material supply and demand, saving purchasers and suppliers precious time, energy and capital resources.

Direct Alloys concentrates on premium materials, and represents the seller in transactions, providing a unique knowledge based service with over 25 years experience in the specialty metals industry. Our online database and advanced sales tools located at www.directalloys.com offer a dynamic value-added service for suppliers and consumers of high performance metals.

Register for our free industry news email updates!

Direct Alloys LLC, 901 Broad Street, Utica, NY 13501
sales@directalloys.com * www.directalloys.com

Supply of Peeling and other Cold Finishing Equipment for Titanium Processing.

Danieli Centro Maskin, the cold finishing division of the multinational DANIELI group, design and manufacture a wide range of equipment that cover the processes of peeling, drawing, cut to length, straightening, chamfering, packaging and all associated equipment.

Enquiries for individual machines and/or complete cold finishing plants are welcome.
For USA enquiries contact Danieli Corporation USA (Bob Smith Tel: (724) 778 5448; r.smith@danielicorp.com). For all other enquiries contact Danieli headquarters in Italy (Kristiaan van Teutem , Tel: +39 04321957295; k.vanteutem@danieli.it)

Material Wanted:

ONLINE TITANIUM AND SPECIALTY METALS CLEARINGHOUSE – www.directalloys.com

Manufacturers now have access to a dedicated online clearinghouse for their excess prime certified titanium, superalloys, specialty steel and aluminum alloy mill products. Direct Alloys helps mills, forgers, machine shops, fabricators, distributors and end-users sell and locate forging stock, machining bar, wire, plate and sheet inventories. We provide the link between short term material supply and demand, saving purchasers and suppliers precious time, energy and capital resources.

Direct Alloys concentrates on premium materials, and represents the seller in transactions, providing a unique knowledge based service with over 25 years experience in the specialty metals industry. Our online database and advanced sales tools located at www.directalloys.com offer a dynamic value-added service for suppliers and consumers of high performance metals.

Register for our free industry news email updates!

Direct Alloys LLC, 901 Broad Street, Utica, NY 13501
sales@directalloys.com * www.directalloys.com

Supply of Peeling and other Cold Finishing Equipment for Titanium Processing.

Danieli Centro Maskin, the cold finishing division of the multinational DANIELI group, design and manufacture a wide range of equipment that cover the processes of peeling, drawing, cut to length, straightening, chamfering, packaging and all associated equipment.

Enquiries for individual machines and/or complete cold finishing plants are welcome.
For USA enquiries contact Danieli Corporation USA (Bob Smith Tel: (724) 778 5448; r.smith@danielicorp.com). For all other enquiries contact Danieli headquarters in Italy (Kristiaan van Teutem , Tel: +39 04321957295; k.vanteutem@danieli.it)
ITA Board of Directors

**ITA President:**
Michael G. Metz
President, Tirus US
VSMPO Tirus US

**ITA Secretary / Treasurer:**
Dawne S. Hickton
Vice Chair, President & CEO
RTI International Metals, Inc.,

**ITA Vice President:**
Brett S. Paddock
President & CEO
Titanium Industries, Incorporated

**ITA Past President:**
Frank Perryman
President and Chief Executive Officer
Perryman Company

**ITA Director:**
James M. Buch
Vice President Commercial
TIMET, Titanium Metals Corporation

**ITA Director:**
Lawrence D Buhl III
CEO
Lawrence Holdings

**ITA Director:**
Daniel P Buwalda
Plant Manager
Alcoa Power and Propulsion

**ITA Director:**
Hunter R. Dalton
President
ATI Allvac

**ITA Director:**
Markus Holz
Managing Director
HEMPEL SPECIAL METALS GmbH

**ITA Director:**
William B. Kent
Vice President Dynamet & CPP
Dynamet Incorporated

**ITA Director:**
Edward J. Newman
Senior Vice President
Keywell LLC

**ITA Director:**
Jerry St. Clair
President
Vulcanium Metals Incorporated

**ITA Director:**
Graham P. Walker
Vice President & General Manager
Reading Alloys Inc., an AMETEC Co.
Current Membership Includes the Following Companies

Thank you for your continued support. Every issue of the TITANIUM Update Newsletter will recognize members that have renewed their investment with the International Titanium Association.

20+ Years
Alcoa Power & Propulsion
Allegheny Technologies Incorporated
   ATI Allegheny Ludlum
   ATI Allvac
   ATI Engineered Products
   ATI Wah Chang
Dynamet Technology, Incorporated
Monico Alloys, Incorporated
Rolled Alloys
RTI International Metals, Inc.
   RTI Claro
   RTI Energy Systems
   RTI Fabrication
   RTI Niles
Lawrence Holdings
   Alloy Metals Inc.
   Snappy Materials LLC
   Supra Alloys Incorporated
   TICO Titanium Incorporated
TIMET, Titanium Metals Corporation
   Loterios SpA
Titanium Fabrication Corporation
Titanium Industries, Incorporated
Ulbrich Stainless Steels & Special Metals, Inc.
United Titanium, Inc.
Vulcanium Metals Incorporated

10 – 14 Years
Bodycote
Cristal USA Inc DBA International Titanium Powder
Corrosion Materials
FAE S.A. Fabricación de Aleaciones Especiales S.A.
Fort Wayne Metals
GfE Metalle und Materialien GmbH
Grandis Titanium
HEMPEL SPECIAL METALS GmbH
Hi Tech Alloys
Luxembourg Company of Metals & Alloys S.A
Pacific Cast Technologies, Inc.
Plymouth Engineered Shapes
President Company, Ltd.
Sandinox Comércio, Importação e Exportação, Ltda
Shanghai Huaxia Industry Co., Ltd.
Sims Metal Management Aerospace
Solar Atmospheres, Inc.
Spectore Corporation
Somet Company Limited
STRATCOR, Inc.
Strohecker Incorporated
ThyssenKrupp VDM GmbH
Tianjin Hengtai Industry and Trade Co, Ltd.
Tibraisil Titanio Ltda
Titanium Finishing Company
Trans World Alloys Company
VALTIMET
   High Performance Tube Inc.
Wellmet International Inc
Zak, Incorporated

15 – 19 Years
BIBUS METALS AG
Consarc Corporation
Dynamet Incorporared
Excelco Developments Incorporated
Keywell LLC
Osaka Titanium Technologies CO., Ltd.
Perryman Company
President Titanium Incorporated
Reading Alloys Incorporated, an AMETEK Company
Retech Systems LLC
Sumitomo Corporation of America
TIODIZE Company, Inc.
Titanium Engineers, Inc.
Toho Titanium Company, Ltd.
Tricor Industrial, Inc.
TSI Titanium
VSMPO-AVISMA
   NF & M International Incorporated
   VSMPO - Tirus China Ltd.
   VSMPO TiRus GmbH
   VSMPO Tirus UK Ltd.
   VSMPO Titan Ukraine Ltd.
   VSMPO-Tirus, US

5-9 Years
Accushape Inc.
Aerodyne Alloys LLC
AlloyWorks, LLC
Avon Metals Ltd
Bahco
Baoji Titanium Industry Co Ltd
CEFIVAL
ELG Utica Alloys, Inc.
EURO-TITAN Handels AG
Form & Technik GmbH
FRIGGI N.A. Inc.
G&S Titanium, Inc.
Goodrich Corporation - Landing Gear Div.
HORIE Corporation
Jiangsu Hongbao Group Co., Ltd.
KASTO, Inc.
Medart Inc.
Nu-Tech Precision Metals, Inc.
Olympus Innov-X
R J Enterprise, Inc
Current Membership Includes the Following Companies

Robert Zapp Werkstofftechnik GmbH
Roskill Information Services
S. Letvin & Son, Inc.
Sandvik Materials Technology
Specialty Metals Company
Specialty Metals Processing Inc.
S-Tech Corp
T.M.P. Titanium Mill Products Ltd
Thermo Scientific Niton Handheld XRF Analyzers
United Alloys & Metals, Inc.
Uniti Titanium
Verichek Technical Services, Inc.
West Penn Testing Group Inc.
Western Smelting & Metals, Inc.
Westmoreland Mechanical Testing & Research, Inc.

1 – 5 Years
ACNIS International
ADMA Products, Inc.
Aeromet International PLC
Akrapovic D.D.
ALD Vacuum Technologies Inc.
AMADA Machine Tools America, Inc.
American Titanium Works, Inc.
Architectural Titanium LLC
ArgeX Mining Inc.
Arnold Magnetic Technologies Rolled Products
Baltic Titan Ltd.
Baoji Ronghao Titanium Industry Co., Ltd.
BioRtechnologies of Brazil
Bluewater Thermal Solutions
Bruker Elemental
California Titanium, LLC
Carver Machine Works Inc.
Center for Advanced Mineral and Metallurgical Processing
Chaoyang Jinda Titanium Co Ltd
Chesapeake Industrial Cleaning Products, Inc.
CSI, The Council for Scientific and Industrial Research
CSIRO, Titanium Technologies
Dalian BHN Special Materials Ltd.
DANIELI Centro Maskin
Dat Quang Chu Lai Minerals Joint Stock Co.
DGA/CTA
DHL Drawback Services
Direct Alloys LLC
DKSH Switzerland Ltd
EWI
Fluor Corporation
Friedrich Kocks Pittsburgh Co.
GIE Media
Hailong (Zhang Jiagang) Industry Co Ltd
Hermes Abrasives, Ltd.
Hunan Xiangtou Goldsky Titanium
Hunter Minerals Pty Limited
Independent Forgings & Alloys Limited
Industrial Metals International Ltd.
Intermountain Consumer Professional Engineers
Latrobe Specialty Steel Company
Makino
Materials and Electrochemical Research (MER) Corp.
Metalvalue Ltd
Metalysis Ltd
MetCon, LLC
METRACO NV
Mid-West Machine
Northern Illinois University
Parker, Messana & Assoc. Inc.
Qinghai Supower Titanium Co., Ltd.
Quad Engineering Inc
Quebec Metallurgy Center
Reactive Metals Studio, Inc.
Realum Ind. Corn. De Metais Puros E Ligas Ltda
ReMelt Scientific Inc.
Rex Heat Treat
Rock Island Arsenal
Roll Forming Corporation
Saigon Quy Nhon Mining Corporation
Schaffer Grinding Co., Inc.
SeaCast, Inc
Service Steel Aerospace
Solar Manufacturing, Inc.
StarragHeckert, Incorporated
TechSolve Inc
Ti Squared Technologies, Inc.
TIFAST s.r.l.
Timesavers International BV
TITAL GmbH
Titanium Consulting & Trading S.r.l.
Titanium International Group SRL
Titanium Processing Center
Titanium Products and Consulting, Inc.
TLI Group Ltd.
Totall Metal Recycling Inc.
Trepoothing Specialties, Inc
Trulife
TZ Minerals International Pty. Ltd.
University of Northern Iowa
Webco Industries, Ameri-Ti Specialty Tube Division
Weber Metals Inc.
Western Superconducting Technologies Co., Ltd.
Xi’an Metals & Minerals Import & Export Co., Ltd.

New Members 2011
GE Aviation
KV-Titan
Oakley X-METAL
Todays Metals LLC

Founded in 1984, the International Titanium Association is a nonprofit networking trade association for the titanium industry. Current membership includes over 200 organizations.