RTI Completes Remmele Acquisition to Expand Downstream Opportunities

RTI International Metals, Inc. (NYSE: RTI), a global supplier of advanced titanium mill products and fabricated components, today announced that it has completed its acquisition of Remmele Engineering, Inc., a provider of precision machining and collaborative engineering, as well as other key technologies and services, for the aerospace and defense and medical device sectors.

RTI and Remmele announced a stock purchase agreement for RTI to acquire Remmele on January 10, 2012. The acquisition of Remmele builds upon RTI’s goal of becoming a fully integrated

Carpenter Completes Latrobe Acquisition; Full Integration to Begin Immediately

Wyomissing PA—Carpenter Technology Corporation (NYSE: CRS) today announced that they have completed the acquisition of Latrobe Specialty Metals, Inc. following approval by the U.S. Federal Trade Commission (FTC).

In June 2011, the companies announced a definitive merger agreement whereby Carpenter would acquire Latrobe in a transaction valued at approximately $558 million based on Carpenter's share price at the time of announcement. Former owners of Latrobe, including Hicks Equity Partners and The Watermill Group, received 8.1 million shares of Carpenter stock as

ATI's New Titanium Sponge Facility Achieves Qualification

PITTSBURGH--(BUSINESS WIRE)--Allegheny Technologies Incorporated (NYSE:ATI) announced today that its Rowley, UT titanium sponge facility has completed the standard-grade qualification (SQ) process. Titanium sponge produced at the Rowley facility can now be applied to many products used for aerospace airframe, medical, and industrial applications.

“This is an important accomplishment as we continue the process of achieving our strategic goal of a cost-effective premium-titanium sponge facility,” said Rich Harshman, Chairman, President and Chief Executive Officer. “This approval follows an extensive series of

TIMET Announces The Opening Of A New European Service & Distribution Facility In France

Dallas, TX- Titanium Metals Corporation (“TIMET”) (NYSE:TIE) announces the opening of a new European Service & Distribution (ESD) facility located in Ugine, France. This new facility will operate as the central distribution hub for TIMET’s expanding presence in Europe which includes titanium mill and melt operations in France, England, and Wales as well as an industrial fabrication facility in Italy.

The ESD will include a multi lingual customer service center-of-excellence and will house the largest and most diverse titanium mill product inventory in Europe with a versatile range of

Continued on Page 7
Continued on Page 5
Continued on Page 4
What's New in Titanium?

West Penn Testing Graduates Class of NDT Inspectors, Begins Training New Class

New Kensington, Penn., 3/14/12—West Penn Testing Group (www.westpenntesting.com), a provider of non-destructive testing and material testing services, has certified the latest class of inspectors to graduate from its in-house training program. James C. DeChellis, West Penn's President/COO, said: "We have been aggressively staffing up our roster of trained NDT personnel to support our resource business plan and in conjunction with end-user demand."

Commenting on the trend among material suppliers and metalworking OEM to outsource more material testing to independent labs, DeChellis said, "Many customers recognize the scope of the commitment needed to stay abreast of changing inspection requirements and technologies. The expenditures in time, effort and capital can be daunting. Fortunately, West Penn has spent years preparing to meet projected demand. As a result, we now have the required capabilities in place and ready to go. For this reason, a growing number of customers are leaving it to us to keep pace with escalating requirements. We have insured that capacity in equipment and personnel are in place for timely responses to work increases."

DeChellis added that based on growing and projected demand, West Penn will be increasing the number of inspectors by 50% in 2012, compared to last year.

"Customers were behind our decision years ago to plan and invest for long-term growth," said DeChellis. "A number of our customers, some of whom are leading indicators of economic trends, shared with us the anticipated capacity requirements of their biggest customers. Recognizing that it takes months and years to ramp up highly complex capabilities, WPT planned the necessary actions to support end-customer-projected demand. We are now positioned with available capacity, cost-effective methods and reliable turnaround times versus leaving everything to chance."

West Penn Testing Group (WPT) offers an extensive array of independent nondestructive testing, chemical testing and material testing services. WPT serves customers in the metals, aerospace, nuclear, commercial manufacturing, military, medical 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. Contact: Albert Fletcher, 724-334-1900 or email afletcher@westpenntesting.com or Bill Libby, 203-820-6655, or email blibby@libbycom.com

TITAL participates in a successful Project at Aachen University of Applied Sciences

Students support weight reduction in aircraft construction - Airbus examines application

The aircraft manufacturer Airbus recently congratulated five students of Aachen University for Applied Sciences (FH Aachen) for their cooperation with TITAL in a joint project to optimize parts for Airbus. The object for the project team during their 10 week project work was to optimize the weight of two brackets.

Thomas Stephan, Airbus Key-Account-Manager at TITAL, assisted the project, and prepared the students specializing in Mechanical Engineering and Mechatronics in their 5th semester (3rd year of studies), for the Kick-Off Meetings at Airbus.

The young people intensively examined the condition of the two brackets that are to be used for the construction of Airbus’ A400M and A350XWB. They looked for solutions in order to considerably reduce the weight of the individual brackets.

Their focus was on the topology of the parts and the use of titanium investment castings for production. The students succeeded in significantly reducing the weight of the brackets compared to the current parts by changing the structure of the components combined with the use of titanium investment castings.

"The results the students achieved are very impressive. They reduced the weight of the brackets by 42.5 per cent or 28.5 per cent per part;" Thomas Stephan happily comments on the designs. Also, Airbus is very satisfied with the project conducted at FH Aachen by the students preparing for their bachelor thesis. The aircraft manufacturer wants to carefully analyze the valuable project findings and possibly implement them in their production. After all, Airbus benefits from every weight reduction of its aircraft.

Continued on Page 3
What’s New in Titanium?

TITAL works hard to continuously develop and increase the technical characteristics of their high-quality products. “We are always open to co-operations with local universities. TITAL benefits from the innovative ideas of the students and the students gather valuable practical experience from projects like the weight reduction project with Airbus and FH Aachen”, Philipp Schack, Managing Director of TITAL confirms the commitment to the education of young engineers. By the way, the efforts for the five students were very worthwhile. The student project work was awarded 1.0, the highest grade possible, by Prof. Dr.-Ing. Hans-Jürgen Raatschen, who assisted the project.

Alcoa works with defense partners to develop new technologies and solutions that make military wheeled vehicles, aircraft and marine vessels lighter, faster, stronger and more efficient and cost-effective. Alcoa Defense solutions include:

- Armor alloy solutions, including Alcoa’s latest innovation – ArmX™ 7085 armor products
- The Fuel Efficient Demonstrator (FED) vehicle developed for U.S. Army Tank Automotive Research, Development and Engineering Center (TARDEC)
- Forged components for military land vehicles Marine plate for naval applications
- Light weight, highly engineered titanium and aluminum investment castings for missile systems and other applications
- Extrusions used in various military aircraft applications, as well as extruded munitions and missile components
- Fastening solutions for traditional aircraft such as the Joint Strike Fighter (JSF) and the F-18, as well as unmanned platforms

Eric Roegner Appointed President, Alcoa Defense
Expands current role as President, Alcoa Forgings and Extrusions

Alcoa (NYSE: AA) announced that Eric Roegner has been named President, Alcoa Defense, effective June 1, 2012, succeeding Dave Dobson, who will retire after successfully leading the business since 2007. Roegner will assume this responsibility in addition to his current role as President of Alcoa Forgings and Extrusions (AFE). In this expanded role, he will also oversee Alcoa’s defense market team to drive lighter and stronger material solutions for customer military platforms.

Roegner was named President of Alcoa Forgings and Extrusions in 2009, a leading global supplier of multi-material forgings, hard alloy aluminum extrusions, and cold finished products in the aerospace, defense, automotive, and industrial markets. Previously, he was President of Alcoa’s Global Hard Alloy Extrusions business, a position he assumed in 2007. Roegner joined Alcoa in 2006 as Chief Operating Officer of Alcoa’s Global Engineered Products business. His leadership experience also includes a 12-year career with management consulting firm McKinsey & Company, where he was a partner in its Cleveland, Ohio office. Prior to this role, Roegner held engineering positions with Nordson Corporation and Schlumberger Limited.

“Eric is well qualified to lead and position Alcoa Defense for top-line growth through new business, product introductions, and strategic alliances,” said Olivier Jarrault, President, Alcoa Engineered Products and Solutions. “He has extensive experience working with customers in the defense industry. As President of AFE, he leads a business that is the major supplier of bulkheads to the F-35 Joint Strike Fighter. Under Eric’s direction, we will continue our strong growth in the defense market.”

Alcoa is the world’s leading producer of primary and fabricated aluminum, as well as the world’s largest miner of bauxite and refiner of alumina. In addition to inventing the modern day aluminum industry, Alcoa innovation has been behind major milestones in the aerospace, automotive, packaging, building and construction, commercial transportation, consumer electronics and industrial markets over the past 120 years. Among the solutions Alcoa markets are flat rolled products, hard alloy extrusions, and forgings, as well as Alcoa® wheels, fastening systems, precision and investment castings, and building systems in addition to its expertise in other light metals such as titanium and nickel-based super alloys. www.alcoa.com.
Dynamet Technology, Inc. (Burlington, MA) has received qualification approval from Boeing for the supply of Ti-6Al-4V alloy products for structural components on commercial aircraft. The Dynamet advanced powder metal (PM) manufacturing technology involves the cold consolidation of blended elemental titanium and alloy powders and vacuum sintering, with or without subsequent hot isostatic pressing, to produce powder metal products in basic shapes and near-net shape product forms.

After years of development and qualification effort including establishing design allowables from Dynamet supplied material, a Boeing Material Specification has been released with Dynamet Technology as the only qualified manufacturer for PM Ti-6Al-4V product for Boeing Commercial Airplanes. This major milestone now permits Boeing Commercial Airplanes and their component supply chain to begin the process of substituting the PM Ti-6Al-4V alloy product as an alternative to machining from standard grades of Ti-6Al-4V, for example bar, plate, castings, forgings or extruded products.

Mr. Stanley Abkowitz, CEO of Dynamet Technology, Inc. indicated that this near-net shape PM manufacturing technology will result in lower cost titanium products and in reduced product lead-times for titanium aircraft components. Dynamet is exploring opportunities to facilitate and accelerate its growth to meet future demands.

Dynamet Technology is a supplier of near-net shape components produced by its advanced powder metallurgical process. These components are produced from standard titanium alloys as well as Dynamet’s proprietary titanium alloys and metal matrix composites in prototype and production quantities for military, industrial, aerospace and biomedical applications. For more information contact: Stanley Abkowitz Phone: 781-272-5967, sabkowitz@dynamettechnology.com

Titanium sponge is a critical raw material used to produce titanium mill products. The ATI Rowley facility uses the Kroll reduction - vacuum distillation process, which reduces titanium tetrachloride with magnesium to produce the sponge.

“The qualification comes at an historic time in the aerospace industry as OEMs increase production to unprecedented rates for both airframes and jet engines. We are also seeing increased demand from the jet engine aftermarket. In addition, demand remains strong for our titanium products from the medical and industrial markets.”

Titanium sponge is a critical raw material used to produce titanium mill products. The ATI Rowley facility uses the Kroll reduction - vacuum distillation process, which reduces titanium tetrachloride with magnesium to produce the sponge.

Building the World’s Best Specialty Metals Company® -- Allegheny Technologies Incorporated is one of the largest and most diversified specialty metals producers in the world with revenues of approximately $5.2 billion during 2011. ATI has approximately 11,400 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 ATI website is www.ATImetals.com.

For more information contact Allegheny Technologies Incorporated, Dan L. Greenfield, 412-394-3004 or visit their website at www.ATImetals.com.
a part of the transaction. Pursuant to the terms of the merger agreement, Carpenter also paid approximately $168 million in cash at closing to pay off Latrobe debt and reimburse certain transaction costs.

As part of the FTC approval, Carpenter entered into a consent decree to transfer assets and technical knowledge to Eramet S.A. and its subsidiaries, Aubert & Duval and Brown Europe, which will allow them to become a second manufacturer of two specific alloys in order to provide customers with a supply alternative in the marketplace. The alloys (MP35N® and MP159®) have minimal sales impact, and will cause no material change to the economics of the transaction. Carpenter has agreed to transfer or acquire assets worth approximately $5 million as part of the agreement with Eramet, and will record a charge for this liability in the current quarter.

Concurrent with the closing of the transaction, Carpenter’s Board of Directors has elected Thomas O. Hicks, Chairman and Chief Executive Officer of Hicks Equity Partners and Steven E. Karol, Managing Partner and Founder of The Watermill Group to the Board, consistent with the terms of the merger agreement.

“We’re excited to begin the next chapter in the history of these two great companies,” said William A. Wulfsohn, Carpenter’s President & CEO. “We will immediately begin to integrate the businesses and focus on leveraging the combined capabilities to increase production capacity and optimize total system costs. A key benefit of this transaction – in combination with our new premium products focus facility in Alabama – will be to substantially increase production to meet strong customer demand for premium products. We still expect the transaction will be accretive to shareholders in the first full year and strongly accretive thereafter.”

“I am excited to join the Carpenter Board and support the Company in realizing its strategy to be the leading provider of specialty materials globally,” said Steven E. Karol. “The Latrobe competencies paired with Carpenter’s current and future capabilities are an extraordinary combination.”

“I am pleased by the focus and collaboration our teams demonstrated in completing this transaction,” said Thomas O. Hicks. “The combined companies have strong growth prospects in their business markets and

Andy Ziolkowski has been selected to lead operations at Latrobe as Senior Vice President – Latrobe Operations. Ziolkowski has been with Carpenter Technology for more than two decades and recently held the position of Vice President – Bar and Coil Business, and Senior Vice President – Strategic Integration to lead the integration planning efforts. He holds an MBA from St. Joseph’s University, Philadelphia and an undergraduate degree from Indiana University of Pennsylvania.

Chris DiSantis, Latrobe’s President & CEO since January 2011, will continue in a consulting role for Carpenter.

For more information contact William J. Rudolph, Jr., 610-208-3892 wrudolph@cartech.com or Investor Inquiries: Michael A. Hajost, 610-208-3476, mhajost@cartech.com

*MP35N and MP159 are Registered Trademarks of SPS Technologies, LLC

Celebrities Continue to Embrace Contemporary Metals

At the Golden Globes, Contemporary Metals continue to show up on the Red Carpet. Designer Edward Mirell was worn by a multitude of celebrities at this year’s Golden Globes from such hit shows as Dexter, GLEE and Boss as well as movie celebrities from Moneyball and many others.

Contemporary Metal Jewelry has been seen on every major red carpet event over the past few years and the interest levels continue to grow. The want for these looks and materials spans over television, movie and music industries driving success in retail stores nationwide.

CEO and designer Edward Rosenberg, of Edward Mirell, states “We all have witnessed the power of ‘Tipping Point’s.’ Most often it begins with the celebrities who are in the eyes of the consumer. They influence and are the driving force to today’s and future generations.”

For more information on Spectore visit their website at www.spectore.com.
What’s New in Titanium?

MAKINO'S ADVANTIGE™ TITANIUM MACHINING TECHNOLOGY WINS AVIATION WEEK INNOVATION CHALLENGE

Makino’s ADVANTIGE™ titanium machining technology wins Aviation Week’s 2012 Innovation Challenge for overcoming the traditional limitations of low metal-removal rates and rapid tool wear in titanium aerospace part manufacturing. As winner of the manufacturing processes category, ADVANTIGE was recognized as a game-changing innovation that provides four times the productivity and four times the tool life of conventional titanium machining technologies.

"ADVANTIGE is a revolutionary titanium machining solution that is set to change the economics of titanium aerospace part manufacturing with unmatched speed, accuracy and tool life," said Tom Clark, vice president of Makino. “To be awarded Aviation Week’s distinguished Innovation Challenge is an honor and a testament to this cutting-edge technology and the dedication of our engineers.”

Makino's ADVANTIGE technology has been introduced as part of Makino’s T-Series 5-axis horizontal machining centers for the aerospace industry, which currently includes the T4 and T2. With continued investments in titanium research and development, Makino is committed to supporting ADVANTIGE customers with advanced titanium machining process solutions for the highest levels of productivity and profitability.

Innovation Challenge winners were announced March 7 during the Innovation Challenge Showcase at the Washington Marriott in Washington, D.C. The event, produced by Aviation Week with media support from Aviation Week & Space Technology, Defense Technology International and Second Line of Defense, marked a full day of focus on aerospace innovation, including recommended industry actions, insights and observations.

ADVANTIGE Technologies: ADVANTIGE is composed of several key titanium machining technologies including a high power, high-torque tilting spindle, Collision Safe Guard and Autonomic Spindle Technologies, high-pressure, high-flow coolant system, vibration damping system and a rigid machine construction.

The ADVANTIGE high-power, high-torque tilting spindle (HSK 125; 4,000 rpm) is integrated with 1,100 ft - lbs of duty-rated torque (740 continuous) to handle the high tensile strength of titanium. Its advanced A-axis twin servo-drive tilting head provides the speed, torque and accuracy necessary to reliably perform full 5-axis roughing and contouring in titanium.

Some of the greatest risks to the titanium machining process are excessive cutting forces that could result in costly material, tool or spindle damages. ADVANTIGE uses Collision Safe Guard and Autonomic Spindle Technologies to monitor the cutting conditions of upcoming tool paths and adjust cutting forces on the fly for improved productivity and tool life.

The ADVANTIGE high-pressure, high-flow coolant system delivers large volumes of high pressure coolant directly to the cutting zone for increased chip evacuation from multi-flute tools. The coolant system includes overhead shower, spindle nozzle and through-spindle coolant for improved cooling, lubrication and chip evacuation in titanium parts. By adjusting frictional forces based on low-frequency vibration sensing, the ADVANTIGE vibration damping system avoids chatter and cutter damage resulting from structure resonance in real time. This vibration suppression enables deeper cuts, higher metal-removal rates and reduced tool wear.

The rigid construction of ADVANTIGE enhanced T-Series 5-axis horizontal machining centers provides a solid, reliable platform for all other technologies and further suppresses vibration for reduced tool chipping and improved metal-removal rates.

To find out more about Makino’s ADVANTIGE technology and T-Series 5-axis horizontal machining centers, visit www.TiMachining.com.

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 makino.com.
What’s New in Titanium?

RTI Completes Remmele Acquisition
Continued From Page 1

supplier of advanced titanium components across the entire supply chain.

Dawne S. Hickton, Vice Chair, President and CEO of RTI, said, “The Remmele acquisition provides RTI with significant growth opportunities that will allow us to expand our portfolio to meet the evolving needs of customers who are looking for an end-to-end supplier of advanced titanium products. Already the customer feedback has been tremendous, and we are delighted to be able to quickly close the acquisition so that we can execute upon our well-defined integration plan.”

While Remmele will significantly enhance RTI’s existing downstream capabilities to meet the exacting engineering needs in the energy, aerospace and defense sectors, it also delivers excellent growth potential for RTI in the medical devices market. Specifically, RTI’s current and prospective customers will benefit from Remmele’s two precision aerospace machining plants for titanium parts for next generation aircraft, as well as Remmele’s two other plants that supply medical device products for the minimally invasive surgery, spinal, and vascular markets, alongside other categories.

The acquisition is expected to be accretive to earnings for the full year 2012. It is also expected to provide meaningful revenue synergies through the expanded product offering. As part of the integration process, Remmele’s key senior leadership will remain in place and Paul J. Burton and John L. Bowden will lead the Remmele organizations, reporting directly to James L. McCarley, Executive Vice President of Operations.

RTI acquired Remmele from Goldner Hawn Johnson & Morrison Incorporated for a total sum of approximately $182.0 million, a reduction from the previously announced transaction value of $182.5 million. The mix of consideration has changed to approximately $179.0 million in cash and the assumption of approximately $3.0 million of equipment leases.

Barclays Capital acted as financial advisor to RTI, and Buchanan Ingersoll & Rooney PC acted as RTI’s legal advisor. Greene Holcomb & Fisher LLC was the financial advisor to Remmele, and Faegre Baker Daniels LLP acted as the legal advisor.

Company Description: RTI International Metals, Inc., headquartered in Pittsburgh, specializes in advanced titanium, meeting the requirements of the world’s most technologically sophisticated applications in commercial aerospace, defense, propulsion, energy, industrial, chemical, and medical markets. For over 60 years, RTI has been taking titanium further through advanced manufacturing, engineering, machining, and forming processes. RTI delivers titanium mill products, extruded shapes, form-ready parts, and highly engineered components through our downstream integrated supply chain. RTI has locations in the United States, Canada, Europe, and Asia. To learn more about RTI International Metals, Inc., visit our website at www.rtiintl.com.

TIMET Announces New Facility In France
Continued From Page 1

TIMET, headquartered in Dallas, Texas, is a leading worldwide producer of titanium metal products. Information on TIMET is available on its website at www.timet.com.

technical specifications supporting both international standards and customer specific requirements from key aerospace OEMs. Customers will benefit from a wide range of services including cutting technologies, such as water jet cutting, and a variety of other value added and supply chain programs. The ESD is ideally positioned to support the growing requirements for titanium in the aerospace, medical, and industrial markets.

The opening ceremony last week was attended by Hervé Gaymard, Savoie General Council President; Frank Lombard, Mayor of Ugine; and nearly 100 customers. On behalf of Safran group, Denis Vercherin, Senior Vice-President for Industry commented during the keynote address: “We have a long term relationship with the TIMET group worldwide and specifically in France, recognizing TIMET product quality and innovation. We look forward to strengthening this business relationship with the increased level of service that TIMET will bring to the Safran group through this new facility, aiming at simplifying our supply chain management.”

Jim Buch, TIMET Executive Vice President, noted “The opening of ESD is indicative of TIMET’s continuing commitment to exceptional service. As an integral element of TIMET’s capacity, product and technology expansions at our European and North American plants, the addition of the ESD to TIMET’s capabilities will ensure TIMET continues to be prepared to respond to our customers’ growing needs.”

The opening ceremony last week was attended by Hervé Gaymard, Savoie General Council President; Frank Lombard, Mayor of Ugine; and nearly 100 customers. On behalf of Safran group, Denis Vercherin, Senior Vice-President for Industry commented during the keynote address: “We have a long term relationship with the TIMET group worldwide and specifically in France, recognizing TIMET product quality and innovation. We look forward to strengthening this business relationship with the increased level of service that TIMET will bring to the Safran group through this new facility, aiming at simplifying our supply chain management.”

Jim Buch, TIMET Executive Vice President, noted “The opening of ESD is indicative of TIMET’s continuing commitment to exceptional service. As an integral element of TIMET’s capacity, product and technology expansions at our European and North American plants, the addition of the ESD to TIMET’s capabilities will ensure TIMET continues to be prepared to respond to our customers’ growing needs.”
What’s New in Titanium?

Hydrogenated Titanium Powder

In January 2011, ADMA Products Inc. (a dba of Advance Materials Products, Inc.) produced its first Hydrogenated Titanium Powder in the United States of America. With this step, ADMA, a powder metallurgy solid state consolidator of products made from titanium, zirconium, niobium, stainless steel, nickel, and other advanced materials for almost thirty years, became a fully integrated titanium manufacturing enterprise. ADMA now produces “in house”, ADMA Hydrogenated Titanium Powder and semi finished and finished titanium products.

Titanium components consolidated from ADMA’s domestically and internationally patented Hydrogenated Titanium Powder achieve full density after sintering and processing, have extremely refined microstructures, and extremely high purity. They are completely “weldable”. The ADMA “blended elemental” alloying process allows any titanium alloy to be prepared quickly and easily from ready to consolidate alloy powders.

Independent government laboratory and OEM testing has consistently shown that ADMA Hydrogenated Powder produced components surpass the requirements of ASTM, Mil-DTL 46077, and Aerospace Materials Specifications (AMS) established for ingot based titanium, and, they do so at far lower cost, with lower energy input and shorter lead time to finished products. Speakers from the Boeing Company and Pacific Northwest National Laboratory will announce at the AeroMat 2012 Conference in Charlotte, North Carolina, that ADMA Hydrogenated Titanium Powder Based Components have met and surpassed high cost ingot metallurgy titanium processes. To review the abstracts of those presentations visit the following link: http://asm.confex.com/asm/aero12/webprogram/Session4041.html

In the next twelve months ADMA Hydrogenated Titanium Powder production capacity will grow to over 100,000 lbs per annum. Three Million lbs per annum production is planned by the end of 2013. Given ADMA Hydrogenated Titanium’s “buy to fly” ratio of 1.02 to 1.0 (close to zero scrap rate), this amount of titanium will have a significant impact in the marketplace. For further information please contact gia@admaproducts.com (330) 650-4000.

Tricor Metals recognized by American Electric Power for early adoption of energy efficiency and environmentalism

Tricor was recognized on April 1, 2012 for their commitment to energy efficiency and the environment by participating in AEP Ohio’s savings incentives programs for business. As a result of their leadership they will reduce energy use by 31104 kWh per year and reduce CO2 emissions by 26.6 tons.

Mike Stitzlein, president of Tricor Metals, remarked that “The energy efficiency programs we have developed have an immediate impact and will continue to conserve utility costs. Tricor has been active in recycling for many, many years. Our metal recycling program includes detailed and disciplined methods for recycling our primary metals. Over the years our team has recycled many tons of metal. This saves Tricor money and is a cleaner use of resources. And it also saves energy. We will continue to look for sustainable methods to reduce costs and improve our methods. Productivity and a keen focus often seem to result in ‘greener’ ways to do business.”

Tricor Metals is a woman-owned, small business with facilities in Ohio, Texas and Michigan. Tricor has over twenty-five years of experience in titanium metals distribution and fabrication of ASME Code equipment for solving corrosion in industry. For more information contact Ron Krajcik at 330.264.3299 x2114 or ron@tricormetals.com.
TITANIUM 2012

The premier international conference you don’t want to miss!

TITANIUM 2012, the 28th annual conference and exhibition will provide attendees with a wide range of networking opportunities to exchange ideas and gain valuable insight into the state of the global titanium industry.

TITANIUM 2012 at the Hilton Atlanta will be even larger, offering an expanded exhibition hall with more booth opportunities, a full poster session dedicated to academic research, more breakout rooms to host your private business meetings and even more networking tools will be integrated into the daily program to ensure you meet the people you are seeking and you have the ability to connect with delegates from across the globe.

Register early for discounted rates and come prepared to cover a vast amount of information in a short amount of time.

Visit www.titanium.org

World Industry Demand Trends

Military Airframe and Land Based Applications
Richard J. Harshman
Chairman, President and CEO - Allegheny Technologies Incorporated

Jet Engines
James M. Buch
Executive Vice President, Commercial - TIMET, Titanium Metals Corporation

Commercial Aerospace Airframes
Dawne S. Hickton
Vice Chairman, Chief Executive Officer, and President - RTI International Metals, Inc.

Overview of Russian Market for Titanium Mill Products
Michael G. Metz
President - VSMPO Tirus US

Outlook of Titanium Industry in China
Wuzhuang Zou
President - Baoji Titanium Industry Co., Ltd

Outlook for Japan Titanium Industry
Shozo Nishizawa
President - OSAKA Titanium technologies Co., Ltd

Industrial Markets
Gilles Dussart
Chief Operating Officer - VALTIMET

World Industry Demand Overview
Frank L. Perryman
President and Chief Executive Officer - Perryman Company

Reserve your exhibition booth, private meeting space and sponsorship opportunities at www.titanium.org!
World Industry Demand Trends
Commercial Aerospace
Powder Metallurgy
Manufacturing Techniques
Automotive
Economics
Alternative Energy Exploration
Industrial Markets
Machining
Manufacturing Technology
Medical Applications
Military/Defense
New Manufacturing
Supply Chain Management
Welding of Titanium
World Industry Supply Trends

Call For Papers - Abstract Submission Guidelines

Interested presenters (members & non-members) may submit abstracts by Email to: conference@titanium.org

Abstracts should be 1,200 characters or less in a Microsoft Word file format. Include sufficient detail for fair evaluation of the proposed paper and presentation and indicate which panels you would prefer to participate.

Complete contact information for all co-authors, biographical information, a black and white high resolution photo of the presenter, and your preferred panel is required with your abstract. Only abstracts in English will be considered.

The Call for Papers Deadline has been extended until May 15, 2012.

2012 Exhibitors:

ADMA Products, Inc.
Alcoa-Howmet Titanium Ingot
ALD Vacuum Technologies Inc.
AMETEK - Reading Alloys
Bahco
Baoji Special Steel Titanium Industry Co., Ltd.
Bodycote
BRUKER
CEFIVAL
Chaoyang Jinda Titanium Co., Ltd.
Consarc
Dalian BHN Special Materials Ltd.
Dat Quang Chu Lai Minerals JSC.
Direct Alloys, LLC
DLA Strategic Materials
Dynamet Incorporated
ELG Utica Alloys, Inc.
Evraz STRATCOR, Inc.
Fluor Corporation
Friggi SrL
GNB Corporation
Grandis Titanium
HORIE Corporation
Industrial Metals International Ltd.
International Titanium Powder
Invera
J. L. Becker Company
Japan Titanium Society
KASTO Inc.
Keywell LLC
Latta Equipment Company, Inc.
Lawrence Holdings, Inc.
Medart, Inc.
Mid-West Machine
Monico Alloys, Inc.
Ningxia Orient Tantalum Industry Co., Ltd.
Nu-Tech Precision Metals
Olympus Innov-X
Parker, Messana & Associates, Inc
Perryman Company
Plymouth Engineered Shapes
Retech Systems LLC
REX Heat Treat
Rolled Alloys
RTI International Metals, Inc.
Russamer Lab LLC
Sandvik Materials Technology
Service Steel Aerospace
Shaanxi Lasting Titanium Import And Export Co., Ltd.
Shanghai Huaxia Industry Co., Ltd.
Sims Metal Management, Inc.
Solar Atmospheres of Western PA
Solar Manufacturing Inc.
Specialty Metals Processing Incorporated
Spectore Corporation
S-Tech Corp.
Strohecker Incorporated
Thermo Scientific Niton Handheld XRF Analyzers
ThyssenKrupp VDM GmbH
Timesavers International BV
TIMET, Titanium Metals Corporation
Titanium Fabrication Corporation
Titanium Industries, Incorporated
Trepanning Specialties, Inc.
TSI Titanium / Sierra Alloys Company
Ulbrich Stainless Steels & Special Metals, Inc.
United Alloys & Metals, Inc.
Uniti Titanium
Verichek Technical Services, Inc.
VSMPO Tirus US
Vulcanium Metals Incorporated
WEBCO Industries
West Penn Testing Group
Western Superconducting Technologies Co., Ltd.
Xi’an Metals & Minerals Import & Export Co., Ltd.
Zak, Incorporated
Airbus Titanium Procurement Strategy Session
Tuesday, October 9th
Sponsored by RTI International Metals, Inc.

Mr. Eric Zanin
Airbus Senior Vice President & Head of Materials & Detail Parts Procurement
AIRBUS, an EADS Company

The presentation will give a brief overview of the aviation market and Airbus’ development past, present and future and then explain how Airbus’ Procurement strategy is designed to maximize the opportunities, raise to the challenges and mitigate the risks.

Eric Zanin started in Aerospatiale Airbus Division as a Structure Engineer in 1980. From January 2009 to June 2010, Eric Zanin was Head of Business Development & International Cooperation within the Strategy and Future Programs organization. Eric Zanin is Engineer graduated from Arts & Metiers Paris Tech, Master of Management from “Institut du Contrôle de Gestion” (IFG Paris) and INSEAD.

About EADS: EADS is a global leader in aerospace, defense and related services. In 2010, the Group – comprising Airbus, Astrium, Cassidian and Eurocopter – generated revenues of € 45.8 billion and employed a workforce of nearly 122,000.

Mr. Eric Zanin
Airbus Senior Vice President & Head of Materials & Detail Parts Procurement
AIRBUS, an EADS Company

The presentation will give a brief overview of the aviation market and Airbus’ development past, present and future and then explain how Airbus’ Procurement strategy is designed to maximize the opportunities, raise to the challenges and mitigate the risks.

Eric Zanin started in Aerospatiale Airbus Division as a Structure Engineer in 1980. From January 2009 to June 2010, Eric Zanin was Head of Business Development & International Cooperation within the Strategy and Future Programs organization. Eric Zanin is Engineer graduated from Arts & Metiers Paris Tech, Master of Management from “Institut du Contrôle de Gestion” (IFG Paris) and INSEAD.

About EADS: EADS is a global leader in aerospace, defense and related services. In 2010, the Group – comprising Airbus, Astrium, Cassidian and Eurocopter – generated revenues of € 45.8 billion and employed a workforce of nearly 122,000.

Mr. Eric Zanin
Airbus Senior Vice President & Head of Materials & Detail Parts Procurement
AIRBUS, an EADS Company

The presentation will give a brief overview of the aviation market and Airbus’ development past, present and future and then explain how Airbus’ Procurement strategy is designed to maximize the opportunities, raise to the challenges and mitigate the risks.

Eric Zanin started in Aerospatiale Airbus Division as a Structure Engineer in 1980. From January 2009 to June 2010, Eric Zanin was Head of Business Development & International Cooperation within the Strategy and Future Programs organization. Eric Zanin is Engineer graduated from Arts & Metiers Paris Tech, Master of Management from “Institut du Contrôle de Gestion” (IFG Paris) and INSEAD.

About EADS: EADS is a global leader in aerospace, defense and related services. In 2010, the Group – comprising Airbus, Astrium, Cassidian and Eurocopter – generated revenues of € 45.8 billion and employed a workforce of nearly 122,000.

Mr. Eric Zanin
Airbus Senior Vice President & Head of Materials & Detail Parts Procurement
AIRBUS, an EADS Company

The presentation will give a brief overview of the aviation market and Airbus’ development past, present and future and then explain how Airbus’ Procurement strategy is designed to maximize the opportunities, raise to the challenges and mitigate the risks.

Eric Zanin started in Aerospatiale Airbus Division as a Structure Engineer in 1980. From January 2009 to June 2010, Eric Zanin was Head of Business Development & International Cooperation within the Strategy and Future Programs organization. Eric Zanin is Engineer graduated from Arts & Metiers Paris Tech, Master of Management from “Institut du Contrôle de Gestion” (IFG Paris) and INSEAD.

About EADS: EADS is a global leader in aerospace, defense and related services. In 2010, the Group – comprising Airbus, Astrium, Cassidian and Eurocopter – generated revenues of € 45.8 billion and employed a workforce of nearly 122,000.

Mr. Eric Zanin
Airbus Senior Vice President & Head of Materials & Detail Parts Procurement
AIRBUS, an EADS Company

The presentation will give a brief overview of the aviation market and Airbus’ development past, present and future and then explain how Airbus’ Procurement strategy is designed to maximize the opportunities, raise to the challenges and mitigate the risks.

Eric Zanin started in Aerospatiale Airbus Division as a Structure Engineer in 1980. From January 2009 to June 2010, Eric Zanin was Head of Business Development & International Cooperation within the Strategy and Future Programs organization. Eric Zanin is Engineer graduated from Arts & Metiers Paris Tech, Master of Management from “Institut du Contrôle de Gestion” (IFG Paris) and INSEAD.

About EADS: EADS is a global leader in aerospace, defense and related services. In 2010, the Group – comprising Airbus, Astrium, Cassidian and Eurocopter – generated revenues of € 45.8 billion and employed a workforce of nearly 122,000.

Mr. Eric Zanin
Airbus Senior Vice President & Head of Materials & Detail Parts Procurement
AIRBUS, an EADS Company

The presentation will give a brief overview of the aviation market and Airbus’ development past, present and future and then explain how Airbus’ Procurement strategy is designed to maximize the opportunities, raise to the challenges and mitigate the risks.

Eric Zanin started in Aerospatiale Airbus Division as a Structure Engineer in 1980. From January 2009 to June 2010, Eric Zanin was Head of Business Development & International Cooperation within the Strategy and Future Programs organization. Eric Zanin is Engineer graduated from Arts & Metiers Paris Tech, Master of Management from “Institut du Contrôle de Gestion” (IFG Paris) and INSEAD.

About EADS: EADS is a global leader in aerospace, defense and related services. In 2010, the Group – comprising Airbus, Astrium, Cassidian and Eurocopter – generated revenues of € 45.8 billion and employed a workforce of nearly 122,000.

Mr. Eric Zanin
Airbus Senior Vice President & Head of Materials & Detail Parts Procurement
AIRBUS, an EADS Company

The presentation will give a brief overview of the aviation market and Airbus’ development past, present and future and then explain how Airbus’ Procurement strategy is designed to maximize the opportunities, raise to the challenges and mitigate the risks.

Eric Zanin started in Aerospatiale Airbus Division as a Structure Engineer in 1980. From January 2009 to June 2010, Eric Zanin was Head of Business Development & International Cooperation within the Strategy and Future Programs organization. Eric Zanin is Engineer graduated from Arts & Metiers Paris Tech, Master of Management from “Institut du Contrôle de Gestion” (IFG Paris) and INSEAD.

About EADS: EADS is a global leader in aerospace, defense and related services. In 2010, the Group – comprising Airbus, Astrium, Cassidian and Eurocopter – generated revenues of € 45.8 billion and employed a workforce of nearly 122,000.

Mr. Eric Zanin
Airbus Senior Vice President & Head of Materials & Detail Parts Procurement
AIRBUS, an EADS Company

The presentation will give a brief overview of the aviation market and Airbus’ development past, present and future and then explain how Airbus’ Procurement strategy is designed to maximize the opportunities, raise to the challenges and mitigate the risks.

Eric Zanin started in Aerospatiale Airbus Division as a Structure Engineer in 1980. From January 2009 to June 2010, Eric Zanin was Head of Business Development & International Cooperation within the Strategy and Future Programs organization. Eric Zanin is Engineer graduated from Arts & Metiers Paris Tech, Master of Management from “Institut du Contrôle de Gestion” (IFG Paris) and INSEAD.

About EADS: EADS is a global leader in aerospace, defense and related services. In 2010, the Group – comprising Airbus, Astrium, Cassidian and Eurocopter – generated revenues of € 45.8 billion and employed a workforce of nearly 122,000.

Mr. Eric Zanin
Airbus Senior Vice President & Head of Materials & Detail Parts Procurement
AIRBUS, an EADS Company

The presentation will give a brief overview of the aviation market and Airbus’ development past, present and future and then explain how Airbus’ Procurement strategy is designed to maximize the opportunities, raise to the challenges and mitigate the risks.

Eric Zanin started in Aerospatiale Airbus Division as a Structure Engineer in 1980. From January 2009 to June 2010, Eric Zanin was Head of Business Development & International Cooperation within the Strategy and Future Programs organization. Eric Zanin is Engineer graduated from Arts & Metiers Paris Tech, Master of Management from “Institut du Contrôle de Gestion” (IFG Paris) and INSEAD.

About EADS: EADS is a global leader in aerospace, defense and related services. In 2010, the Group – comprising Airbus, Astrium, Cassidian and Eurocopter – generated revenues of € 45.8 billion and employed a workforce of nearly 122,000.
Frequently asked questions when registering for TITANIUM 2012

I have a group of people attending the conference from my company. Can I make a group reservation?

Yes you can make a group reservation; however, you must first complete your registration. On the registration summary page a tab will pop up that says “ADD Person”. Click there. Each person that you register will need a unique email address however you will be able to add yours in the “cc” field.

Is there any reason I should register early for TITANIUM 2012?

If you like to save money - register early! Discounted rates are available on the ITA website.

Can ITA provide me with a Visa Entry invitation letter?

ITA supports international attendees in their efforts to secure the needed travel documentation. To receive a Letter of Invitation, delegates must first register for the conference and pay registration in full before a Letter of Invitation will be issued. The invitation letter will be sent to you via Email only. ITA cannot send letters of invitation via post mail services. If a delegate is not successful in receiving his/her travel Visa, a 75% refund will be issued provided the ITA is notified in writing before September 14, 2012. No refunds will be offered after September 14th. Please understand the ITA will not contact any Embassy on behalf of any participant. TITANIUM Delegates from countries who require a Travel Visa to enter the United States are reminded that the process of obtaining a visa may take several months. Please plan ahead and begin the application process early.

What is the discounted guest room block Hilton?

TITANIUM Delegates receive a special room rate of $210 per night single/double occupancy. The special rooming rate is valid until September 4th or when the block of rooms are sold out. All guest rooms for TITANIUM 2012 must be reserved through the International Titanium Association directly.

Any solicitations from outside housing agencies do not represent the International Titanium Association.

Hilton Atlanta will accept cancellations with no penalty if cancellation occurs within 72 hours of arrival date. Hilton Atlanta Early Departure Fee: In the event a guest who has requested a room within the TITANIUM room block checks out prior to the guest's reserved checkout date, the hotel will add an early checkout fee to that guest's individual account. Guests wishing to avoid an early checkout fee should advise the Hilton Atlanta at or before check-in of any change in planned length of stay.

Do I have to reserve a Guest room at the Hilton through the ITA Website?

YES! All guest rooms reservations for TITANIUM 2012 must be reserved through the International Titanium Association directly to receive the discounted guest room rate. We will collect your Hilton Honors number to ensure you receive Hilton credit for the reservation.

Can ITA provide me with a Visa Entry invitation letter?

ITA supports international attendees in their efforts to secure the needed travel documentation. To receive a Letter of Invitation, delegates must first register for the conference and pay registration in full before a Letter of Invitation will be issued. The invitation letter will be sent to you via Email only. ITA cannot send letters of invitation via post mail services. If a delegate is not successful in receiving his/her travel Visa, a 75% refund will be issued provided the ITA is notified in writing before September 14, 2012. No refunds will be offered after September 14th. Please understand the ITA will not contact any Embassy on behalf of any participant. TITANIUM Delegates from countries who require a Travel Visa to enter the United States are reminded that the process of obtaining a visa may take several months. Please plan ahead and begin the application process early.

My credit card has not been charged for the housing deposit yet. Do I have a reservation?

TITANIUM discounted guest room rates are valid until September 4th OR until the room block is sold out,
whichever comes first. If you made your hotel reservation through the ITA website please be assured that you have secured the room rate and housing reservation.

Although you have made your housing reservations early through the ITA website, the Hilton Atlanta will charge all credit cards in September and the Hilton will send you a confirmation email. The Hilton Atlanta will charge your card for the one night hotel deposit for your stay. Please be assured, by registering through the ITA website you will receive a room at the secured rate.

I need to modify my Hotel Arrival/Departure dates what should I do?
You may modify your travel dates through the ITA website up to September 4 2012. In order to do so you will need to log into your conference reservation and click on the “My Travel” tab. After September 4 2012 all modifications must be completed through the Hilton Atlanta directly. Phone: 1-404-659-2000

I am registered for the conference but am unable to attend. What should I do?
If you have someone to go in your place, you may make a substitution in your registration. By completing a substitution you will not be refunded any amount. If you do not have someone that can attend TITANIUM 2012 in your place then you will be granted a refund according to the cancellation policy which states that all Cancellations must be completed by September 4 2012 in order to receive a refund. No refund will be granted after September 4 2012.

If I register as an expo pass holder what do I get?
Expo pass holders have access to walk the floor of the exhibition during the designated hours. You will NOT have access to any general paper sessions or receptions.

How do I add a tour to my conference registration?
By using your confirmation code you may go into your registration details page click on the “modify” tab. You now can choose the tour or activity you wish to add to your current reservation.

Techniques on how to weld titanium effectively will be covered in a one-day workshop on Tuesday, June 26 in Columbus, OH. 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. Course content includes 5 hours of classroom study with instructions on the correct welding equipment and work area needed for a successful titanium weld, proper joint design, anti-contamination procedures, and how to evaluate procedures and techniques. Also included are 3 hours of hands-on exercises.

This Workshop will provide information on the following categories:

• Titanium History & Background
• Characteristics – What is important for welding.
• General Manufacturing/Welding Processes Used
• Joining: 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

Call 303-404-2221 or email conference@titanium.org

Register online for ITA Educational Workshops and receive discounted registration rates!
Titanium Development Award Nominations

The International Titanium Association (ITA) is seeking nominations for its 6th annual Titanium Development Award, which features a top prize of $20,000. The award winner will be recognized at TITANIUM 2012, 28th annual conference and exhibition, which will be held Oct. 7-10, 2012 at the Hilton Atlanta, 255 Courtland Street NE.

The deadline to submit nominations is May 1. An online version of the nomination form may be downloaded (in a PDF format) directly from the ITA's Web site (www.titanium.org).

Brett Paddock, president and chief executive officer of Titanium Industries Inc., Rockaway, NJ, is the committee chair for the ITA's Applications Development Award. Jennifer Simpson, executive director of the ITA, said the Applications Development Award represents the continuing efforts of the ITA to support and inspire its members (more than 200 organizations and over 1,500 individuals) as well as promote new global business initiatives for the use of titanium.

The award is open to current ITA members or non-members. As stated on the application form, nominations are sought for individuals, teams or organizations in the global titanium industry that demonstrate significant achievement towards improving and expanding the use of titanium.

Completed nomination forms must be sent to the ITA via regular mail (11674 Huron Street, Suite 100, Northglenn, CO 80234 USA); fax: (303-404-9111) or e-mail (ita@titanium.org).

Pilot Scale Hydrogenated Titanium Powder Production Unit

ADMA Products, Inc. received an award (DOD Contract Number W15QKN-11-C-0133) for design and manufacturing a pilot scale hydrogenated titanium powder production unit. This pilot scale unit is being designed using ADMA’s experience on running their laboratory scale powder production unit installed at ADMA’s facilities at the beginning of 2011. A numbers of manufacturing runs performed on this lab scale unit demonstrated the ability to produce the low cost hydrogenated titanium powders with the chemistry levels meeting the critical aerospace applications. It was also demonstrated that the powder metallurgy (P/M) Ti-6AI-4V alloy components produced from these powders meet or exceed the ASTM and AMS specifications.

Pilot scale unit will have 660 lbs/cycle capacity and will be commissioned in September 2012. Its introduction will boost the ADMA’s abilities to supply the P/M Ti and Titanium alloys components for aerospace, military land systems and other critical applications. Visit their website at: www.admaproducts.com

Material For Sale:

JS METAL (Baoji Jinsheng Metal Material Co., Ltd) is a high-tech enterprise mainly engaged in titanium and titanium alloy products. We are located in Baoji, which is well known as “Titanium City”. We supply titanium bar/rod, wire, tube, sheet, bands, foil, and other products to various industry lines all around the world, such as aero space, medical, oil, chemical, etc. And our value added service will be supplied whenever you need. We also have many other equipments such as water cutting machine, line cutting machine, hydraulic press machine, drilling machine, milling
machine, CNC lathe and so on. Thus, we can produce the products as per your requirements and drawing. High quality, good service, competitive price are our priorities.

JS METAL is your first choice for titanium needs. For more details, please visit www.titaniummet.com. Please email us: product@bjjsm.com to get a quote. Thanks for your support.

Contact person: Emily Zhang
Add: 3# building, No.2 Xibao road, Weibin district, Baoji city, Shaanxi province, P.R.China, 721006.
Email: product@bjjsm.com
Tel: +86-0917-3306973
Fax: +86-0917-3306971
Web: www.titaniummet.com

Products of our company are mainly applied in electrochemical panels, equipment manufacturing, and titanium sheet for plate exchangers, titanium metal products and equipment and other fields. Production capacity: hot-rolled titanium rolls—5000t/year, cold-rolled titanium rolls—12000t/year, titanium alloy—3000t/year. Main specifications: thickness: cold-rolled—0.2-3.0mm, hot-rolled—3-16mm; width: cold-rolled—1000-1550mm, hot-rolled—1000-1550mm; weight of each roll: max 10t; variety: Gr1, Gr2, TA0, TA1, TA2, TA9 etc.

Contact: Yunnan Titanium Industry Co., Ltd, Yunnan Province China email: yunti@ynkg.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
Address 249 E. Gardena Blvd. Gardena CA, 90248
Phone: +310-217-8777 Fax: 310-217-0066
Website: http://twalloys.com Email: sales@twalloys.com

C.P. Titanium rod/wire, gr. 2 and gr. 3 FOR SALE

diam. 2 and 3 mm, rod of 1m each and on spooles fully certified.
T.M.P.Titanium Mill Products Ltd., Sheffield
Fax +44 114 2302832, Tel. +44 114 2308855
www.timill.com
Email:paul@timill.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, petrochemical industry, aviation industry and sports appliances.

Our manufacturing capability as follows:
Classified Ads

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

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

California Titanium LLC currently has the following materials:

Grade 5 titanium (Ti-6Al-4V), ASTM B348 round bar @

Dia. 2”
Dia. 2.25”
Dia. 2.50”
Dia. 2.75”
Dia. 3.00”

Please contact sales@caltitanium.com or call (310) 683-8004 for a quote.

---

Titanium Industries is a global manufacturing distributor of most product forms of commercially pure and many alloyed grades of titanium and offers a variety of value added services including sawing, water-jet cutting, shearing, etc. Also, many other metals are inventoried such as nickel alloys, 316LVM, cobalt-chrome-moly, 15-5 and 13-8. Please visit us at www.titanium.com for contact information for the facility/office nearest you in Asia, Europe, North America or South America.

---

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

---

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:  Celia Qi ,the international business manager of Tianjin Hengtai Industry and Trade Co.,Ltd
Add: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.timetals.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

---

Gr.5 1.8*1000*2000mm 2195kgs/137pcs ASNA 3200E
Gr.5 1.6*914.4*238181kgs/11pcs MIL-T-9046J/AMS 4911H/
DMS1592F/ASTM B265
Gr.5 1.8*914.4*2438 692kgs/38pcs MIL-T-9046J/AMS 4911H/
DMS1592F/ASTM B265
Gr.5 1.8*914.4*3048 136kgs/6pcs MIL-T-9046J/AMS 4911H/
DMS1592F/ASTM B265
Gr.5 2.03*914.4*2438 348kgs/50pcs MIL-T-9046J/AMS 4911H/
DMS1592F/ASTM B265
Gr.5 2.03*914.4*3048 348kgs/18pcs MIL-T-9046J/AMS 4911H/
DMS1592F/ASTM B265
Gr.5 1.27*914.4*2438.4 500kgs MIL-T-9046J/AMS 4911H/
DMS1592F/ASTM B265
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

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

Danielo 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)

Visit www.rolledalloys.com

Titanium Weld Color Inspection Kit

OVERVIEW

The Titanium Weld Color Inspection Kit from EWI provides fabricators of titanium with a high quality, comprehensive tool for performing weld color inspection as part of their weld quality assurance process. The kit is considered the standard for visual inspection of titanium weldments across all industries, including defense, aerospace, chemical processing, and more.

FEATURES

- Nine Titanium Weld Samples - Each of the nine sizable weld samples in the kit exhibits a different weld color condition. Three acceptable and six rejectable weld colors are included, ranging from glossy silver to flakey white. All samples are created onsite by EWI's highly skilled engineers.
- Nine Photo Cards - The kit also includes a booklet of high quality images of each of the nine welding conditions along with a description of their color, acceptability, and disposition information as required by technical publication NAVSEA 5974-AR-GB-010/248/278 titled Requirements for Fabrication Welding and Inspection, and Casting Inspection and Repair for Machinery, Piping, and Pressure Vessels.
- Durable Carrying Case - Contents of the kit are housed in a durable, custom-built case that holds and protects the samples while still keeping them visible. A sturdy handle on the case makes it easy to carry, and feet on the bottom allow it to stand upright.

HOW TO ORDER

For more information, or to order the EWI Titanium Weld Color Inspection Kit, contact Randy Dull at 614.688.5095 or rdull@ewi.org, or Nick Kapustka at 614.688.5175 or nkapustka@ewi.org.

Equipment for Sale:

EWI’s Titanium Weld Color Inspection Kit

The Titanium Weld Color Inspection Kit from EWI provides fabricators of titanium with a high quality, comprehensive tool for performing weld color inspection as part of their weld quality assurance process. The kit is considered the standard for visual inspection of titanium weldments across all industries, including defense, aerospace, chemical processing, and more.

FEATURES:

Nine Titanium Weld Samples
Nine Photo Cards
Durable Carrying Case
Titanium Weld Color Inspection Guide
To order contact: Randy Dull at 614.688.5095 or rdull@ewi.org, or Nick Kapustka at 614.688.5175 or nkapustka@ewi.org.

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,
Job Opportunity: Process Development Engineer –
Titanium Group

Do you enjoy working with the latest and greatest technology? Are you well versed in titanium machining, including research and development? Are you seeking an opportunity that will earn you experiences, skills and knowledge that will lead to a reputation as a leading expert in titanium machining? Makino, an international leader in the advanced machining technology industry, is looking for a Process Development Engineer for their Titanium Group. Based in Mason, Ohio, this role is a key member of a group of machining experts focused on the rapidly growing titanium machining market that includes aerospace, medical, defense and other applications requiring high-technology and precision.

The Process Development Engineer is responsible for all aspects of titanium machining research and development utilizing a state of the art training center and Integration Bay in the company’s Global Titanium Research and Development Center. This role will focus on continually enhancing Makino’s competitive advantage and profitability in the titanium market.

Responsibilities include:
• Leading research and development activities for titanium machining to directly drive enhanced profitability.
• Interacting professionally with customers and employees at all levels of the organization.
• Interacting frequently with both internal and external customers to provide operational, optimization and troubleshooting solutions.
• Participation in customer training, industry seminars and other technical information sharing events.

Qualified Candidates should have excellent presentation skills, be a team player and a self-starter, and have:
• Extensive experience (including hands-on technical) with titanium machining in highly engineered applications is required. Horizontal machining applications a plus.
• Technical degree in Mechanical Engineering, Engineering Technology, Manufacturing Engineering or a similar manufacturing technology is preferred.
• Minimum 3 years experience in both manufacturing engineering and process development.
• Previous experience with CAD and/or CAD/CAM engineering software, such as AutoCAD, CATIA, Solid Works, is desired.
• Team player with ability to manage time and projects effectively.
• Excellent communication skills, both verbal and written, including technical writing.
• LEAN / Six Sigma training and certification is a plus.
• Solid business acumen with a direct customer focus and the ability to create and deliver strong presentations and conduct training for a variety of audiences.
• Ability to obtain a passport and other travel documentation as needed.
• Willingness to travel, domestic and international (up to 30%), as required.

Makino is a world leader in metal cutting and manufacturing technology. At Makino employees enjoy a stable environment from a company with years of success and growth in the machine tool industry. We offer competitive pay, generous benefits and ongoing training.


Metallurgical Engineering & Technician Staff

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

Classified Ads

TransWorld Alloys
Email: sthomas@twalloys.com * Tel: (800) 258-8180

Job Postings

Publishing disclaimer from the International Titanium Association (ITA): Information in this newsletter was produced and compiled by the ITA staff, based on press releases and statements from companies involved in the titanium industry. The ITA believes the information presented in this newsletter is timely and accurate. However the ITA DOES NOT endorse or guarantee the claims of any company listed in this publication. Also, as a matter of editorial policy, due to space limitation, items in the ITA newsletter typically do not include the extensive “forward-looking” statements, historical information or company overviews that were issued in the original press release. If there are any questions regarding the information in this newsletter, the ITA strongly suggests that readers contact the specific company for clarification.
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
Allegheny Technologies Incorporated
  ATI Allegheny Ludlum
  ATI Allvac
  ATI Engineered Products
  ATI Wah Chang
Dynemet Technology, Incorporated
Monico Alloys, Incorporated
Rolled Alloys
RTI International Metals, Inc.
  Remmele Engineering, Inc
  RTI Advanced Forming, LTD
  RTI Claro
  RTI Energy Systems
  RTI Fabrication
  RTI Niles
Lawrence Holdings, Inc.
  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

15 - 19 Years
Alcoa Power and Propulsion
AMETEK - Reading Alloys
BIBUS METALS AG
Consarc Corporation
Dynemet Incorporated
Excelco Developments Incorporated
Fort Wayne Metals
Grandis Titanium
HEMPEL SPECIAL METALS GmbH
High Performance Tube, A Division of Valtimet
Keywell LLC
Osaka Titanium Technologies CO., Ltd.
Perryman Company
President Company, Ltd.
President Titanium Incorporated
Retech Systems LLC
Solar Atmospheres, Inc.
Spemet Company Limited
Sumitomo Corporation of America
Tianjin Hengtai Industry and Trade Co Ltd
Tibrasil Titanio LTD
TIODIZE Company, Inc.
Titanium Engineers, Inc.
Toho Titanium Company, Ltd.
Tricor Industrial, Inc.
TSI Titanium
VALTIMET
VSMPO-AVISMA
NF & M International Incorporated
  VSMPO - Tirus China Ltd.
  VSMPO TiRus GmbH
  VSMPO Tirus UK Ltd.
  VSMPO Titan Ukraine Ltd.
  VSMPO - Tirus, US

10 – 14 Years
Bodycote
Corrosion Materials
Cristal USA Inc DBA International Titanium Powder
Evraz Stratcor, Inc.
FAE SA Fabricacion de Aleaciones Especial
GfE Metalle und Materialien GmbH
Hi Tech Alloys
Luxembourg Company of Metals and Alloys S.A.
Pacific Cast Technologies, Inc.
Plymouth Engineered Shapes
Sandinox Comercio, Importaçao e Exportação
Shanghai Huaxia Industry Co. Ltd.
Sims Metal Management Aerospace
Specialty Metals Company
Spectore Corporation
Strohecker Incorporated
ThyssenKrupp VDM GmbH
Titanium Finishing Company
Trans World Alloys Company
Wellmet International Inc
Zak, Incorporated

5-9 Years
Accushape™ Inc.
Aerodyne Alloys LLC
AlloyWorks, LLC
American Titanium Works LLC
Avon Metals Ltd
Bahco
Baoji Titanium Industry Co., Ltd
CEFIVAL
Center for Advanced Mineral and Metallurgical Processing
DGA/CTA
Direct Alloys LLC
ELG Utica Alloys, Inc.
EURO – TITAN HANDELS GMBH
Form & Technik GmbH
FRIGGI N.A. Inc.
G&S Titanium, Inc.
Goodrich Corporation - Landing Gear Division
Hailong (Zhang Jiagang) Industry Co., Ltd
HORIE Corporation
Independent Forgings & Alloys Ltd
Jiangsu Hongbao Group Co., Ltd.
KASTO Inc.
Makino
Medart, Inc.
Nu-Tech Precision Metals
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
Schaffer Grinding Co., Inc.
Service Steel Aerospace
Specialty Metals Processing Inc.
S-Tech Corp
TechSolve Inc
Thermo Scientific Niton Handheld XRF
TIFAST s.r.l.
TITAL GmbH
United Alloys & Metals, Inc.
Uniti Titanium
Universal Alloys & Metals Ltd., incorp. TMP Titanium Mill Products
Verichek Technical Services Inc.
West Penn Testing Group Inc.
Western Smelting & Metals, Inc.
Westmoreland Mechanical Testing & Research, Inc.
Xi’an Metals & Minerals Import & Export

1 – 5 Years
ACNIS International
ADMA Products, Inc.
Akrapovic d.d.
ALD Vacuum Technologies Inc
AMADA Machine Tools America, Inc.
Architectural Titanium LLC
Argex Mining Inc.
Arnold Magnetic Technologies Rolled Products
Baltic Titan Ltd.
Baoji Jinsheng Metal Material Co., Ltd
Baoji Ronghao Titanium Industry Co., Ltd.
BioRTechnologies do Brasil
Bluewater Thermal Solutions
BRUKER
CALIFORNIA TITANIUM, LLC
Carver Machine Works, Inc.
Chaoyang Jinda Titanium Co., Ltd.
Chesapeake Industrial Cleaning Products,
Cool Clean Technologies
CSIR
CSIRO, Titanium Technologies
Dalian BHN Special Materials Ltd.
Danielli Corporation
Dat Quang Chu Lai Minerals Joint Stock Co
DHL Drawback Services
DKSH Switzerland Ltd
EWI
Fluor Corporation
FREDRICH KOCKS GmbH & Co KG
GE Aviation
GIE Media Inc. - Industrial Division
Haynes International Inc.
Hunan Xiangtou Goldsky Titanium Metal Co.
Industrial Metals International Ltd.
Intermountain Consumer Professional Engineers, Inc.
J.L. Becker Company / C. I. Hayes
KV-Titan Ltd.
Latrobe Specialty Steel Company
Materials & Electrochemical Research (MER) Corporation
METALVALUE Ltd
Metalysis Ltd.
MetCon, LLC
METRACO NV
Mid-West Machine
MoTiv Metals LLC
nanoPrecision Products Inc
Northern Illinois University
Oak Ridge National Laboratory
Oakley X-Metal
Parker, Messana & Assoc. Inc.
Qinghai Supower Titanium Co., Ltd.
Quad Engineering Inc
Quebec Metallurgy Center
Reactive Metals Studio, Inc.
Realm Ind. Com. De Metais Puros E Ligas
Remelt Scientific Inc.
Renton Coil Spring Company
Rex Heat Treat
Rock Island Arsenal
Roll Forming Corporation
Saigon Quynhcon Mining Corporation
SeaCast, Inc
Shaanxi Rongyuan Industrial Development Co., Ltd.
Solar Manufacturing, Inc.
StarragHeckert, Incorporated
Ti Squared Technologies, Inc.
Timesavers International B.V.
TITANIUM Consulting & Trading S.r.l.
Titanium International Group SRL
Titanium Processing Center
Titanium Products and Consulting, Inc.
TLI Group Ltd.
Today’s Metals LLC
Tool Peaks Industries Ltd.
Totall Metal Recycling Inc.
Transmatic
Trepanning Specialties, Inc
Trulife
TZ Minerals International Pty Ltd.
Universal Technical Resource Services, Inc.
University of Northern Iowa
Vi-Cal Metals Inc
WEBCO Industries
Weber Metals Inc.
Western Superconducting Technologies Co
Yunnan Titanium Industry Co., Ltd

New Members 2012
GNB Corporation
Invera Incorporated
Jiangsu Hongbao Group Import & Export
Latta Equipment Company Inc.
MetSuisse Distribution AG
Quest Alloys & Metals, Inc.
Sierra Alloys Company
Titanium Valley
Wowtech Titanium Ltd.

* member list as of April 18, 2012