ATI’s UNITI JV Selected to Supply Titanium for World’s Largest Seawater Desalination Project

Pittsburgh, PA (BUSINESS WIRE) – UNITI LLC, an industrial titanium venture jointly owned by Allegheny Technologies Incorporated (NYSE: ATI) and Verkhnaya Salda Metallurgical Production Association (VSMPO), today announced that it has been chosen to supply a significant portion of the commercially pure (CP) titanium to be used in the world’s largest seawater desalination plant.

UNITI expects to supply between 5.5 million and 6.0 million pounds of CP titanium strip that will be used to produce titanium tubing for the project. This is the largest order in UNITI’s

Continued on Page 6

Carpenter Technology Announces Expansion of Titanium Facility to Support Growing Aerospace Fastener Wire Demand

Wyomissing, PA - Carpenter Technology Corporation (NYSE: CRS) today announced an expansion of its Dynamet titanium wire and bar facility in Clearwater, Florida. Dynamet, a wholly-owned subsidiary of Carpenter Technology Corporation, is a leading producer of titanium wire feedstock for the aerospace fastener industry.

“This investment will include construction of a new building and installation of proprietary manufacturing facilities to produce close tolerance, high performance wire for manufacturing titanium aerospace fasteners,” said

Continued on Page 5

VSMPO Announces Expansion of Titanium Bar and Rod Production

VSMPO - AVISMA Corporation announced today that its subsidiary, Tirus US, is expanding into the production of small diameter bar and wire at its NF&M manufacturing facility in Monaca, PA. Target markets are aerospace and medical applications, where the company is already a large supplier and these products primarily represent an extension of VSMPO’s existing customer relationships. Other industries such as automotive will also be beneficiaries of this expanded facility.

“The market for aerospace fasteners is expected to increase dramatically over the next several years with the growing production of composite-based airplanes like the Boeing 787 and Airbus A350,

Continued on Page 7

TITANIUM INDUSTRIES Continues to Expand

Looking to penetrate the rapidly expanding Chinese market for aerospace, medical products and industrial business opportunities, Titanium Industries Inc., Rockaway, NJ, USA, has opened a sales office in Shanghai. Alexis Zhu, who has extensive experience in metal distribution networks and China’s aerospace industry, is the point person for Ti Industries’ sales of titanium products and high-performance metals such as stainless steel, nickel and cobalt-chrome-molybdenum.

The Shanghai office opened its doors on January 2. John Tien, managing director of Ti Industries Asia Inc.’s Taiwan branch, said the presence of Zhu at the

Continued on Page 5
What’s New in Titanium?

Solar Vacuum Carburizes a 60” Diameter Gear

Solar Atmospheres, Souderton, Pa, announces it has successfully vacuum carburized a large gear required for a defense application that had previously not been successfully processed using atmospheric type equipment.

Recently, Solar modified one of its large 10 Bar Quenching Furnaces to be able to vacuum carburize larger and more extensive loads. By adding new instrumentation, carburizing nozzles, and an improved backfill system, this furnace, with a work zone that measures 48” wide x 72” long x 38” high and load capacity of 10,000 pounds, is capable of performing carburizing cycles on large parts and loads not previously thought possible in vacuum.

The above referenced successful application was a large gear of 9310 Steel material with dimensions of 60” diameter x 13” high and a weight of 1900 pounds. The part was Low Pressure Vacuum Carburized to achieve an effective case depth of .070” followed by a temper, a minus 225°F freeze, and a second temper operation. Quenching was accomplished using a mixture of nitrogen and helium gasses. Flatness was within .100” and roundness within .050”, well within acceptable tolerances.

Solar Atmospheres anticipates that these types of results will further expand the applications for Low Pressure vacuum Carburizing. For more information, please contact Don Jordan, Corporate Metallurgist, or Trevor Jones, Project Engineer.

For additional information or any questions, contact Don Jordan at 215-721-1502 x206 or dfj@solaratm.com or Trevor Jones at 215-721-1502 x351 or tmj@solaratm.com.

DR. ZHIGANG WANG JOINS MAKINO AS SENIOR PROCESS DEVELOPMENT ENGINEER

Wang will help support new titanium machining research in Makino Mason’s Titanium Process Research and Development Group

Mason, OH – 1/2011 – Makino is pleased to announce the addition of Dr. Zhigang Wang to the Makino Mason Titanium Process Research and Development group. Wang brings a wealth of experience in the research of machining titanium and will serve to strengthen Makino’s role as a leader in the titanium machining industry.

“Dr. Wang will be a valuable asset in our ongoing pursuit for more efficient titanium machining processes and technologies,” says Mark Larson, Makino’s Titanium R&D Manager. “He will play an active role in researching new and existing processes, while providing detailed analytical reports that go far beyond simple data on speeds and feeds. With his experience and abilities, Dr. Wang will serve Makino well in extending our knowledge and capabilities around the machining of titanium.”

Wang has extensive experience as a researcher and published author. His works have been published in the CIRP Annals, the International Journal of Machine Tools and Manufacture and the International Journal of Advanced Manufacturing Technology and include “A hybrid cutting force model for machining of titanium alloys”, “High Speed Milling of Titanium Alloys Using Binderless CBN Tools and “Study on Orthogonal Turning of Titanium Alloys with Different Coolant Supply Strategies”.

Wang earned his PhD from the National University of Singapore and also holds a Masters degree from the Nanjing University of Aeronautics and Astronautics in China and a Bachelor of Science degree from the Nanjing Forestry University in Nanjing, China.

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.

TITANIUM 2011 Conference and Hotel information now available online. Visit: http://titanium.org/Category.cfm?CategoryId=262
What’s New in Titanium?

- Titanium Ribs for the Airbus A 380
- TITAL strengthens position as Strategic Supplier
- Delivery “Ready for Assembly“

Bestwig. TITAL GmbH, the titanium and aluminum investment casting specialist in Bestwig, received qualification approvals from Airbus France for the production of several structural parts for the A380. TITAL now delivers three separate titanium investment casting ribs for the pylons – the connection between the engine and the wing – of the 500 passenger mega-airliner. The TITAL foundry based in the Sauerland area produces pylon parts for both engine versions of the A 380, namely the Trent 900 from Rolls Royce and the GP7200 from Engine Alliance. In optical terms these ribs remind you of window frames. TITAL casts these ribs, finishes them completely and delivers them ready for assembly to the Airbus plant in St. Eloi (France). These titanium castings which are designed to bear static and dynamic stresses and are resistant to material fatigue will now go into full production. According to TITAL GmbH, Airbus France is scheduled to produce and deliver three A380 aircrafts per month.

As the ribs must bear special dynamic stresses in practical use, these parts must survive multiple levels of fatigue testing to prove their stress capabilities. These tests are administered by independent testing laboratories certified to international standards. Material fatigue develops when a part is permanently exposed to dynamic strains such as multiple oscillations. As a consequence, these parts must prove their fatigue strength under extreme oscillation stresses. Moreover, the crack growth propagation strength is another important criterion. It provides information on the degree to which the part encounters a crack.

A positive evaluation by external testing laboratories is an essential criterion for the order from Airbus. Berthold Busch, Head of quality management at TITAL explains: “Without a certificate from the testing laboratories, Airbus would not accept these parts.” There is only a small number of companies in the world able to produce this type of quality.

With this qualification TITAL has further strengthened its position as a strategic supplier to Airbus. Philipp Jerusalem, Director Sales & Marketing at TITAL comments: “Airbus France plays an important role for us. We started working with this customer in 2005, but have already realized higher sales than with Airbus Germany even though the German relationship already exists more than 30 years.” The parts have dimensions of approximately 890x640x90 mm (35x25x3.5 inches) and 690x590x130 mm (27x23x5 inches) respectively and serve as a basis for the primary structure of the pylon. Until now TITAL has only supplied castings for the secondary structure of the aircraft (e.g. fairings and covers).

All the supply pipelines run through the pylons, and are among others responsible for engine controls. The A380 has four engines, supplied by Rolls Royce (type Trent 900) or Engine Alliance (type GP7200).

Currently, 244 aircrafts of the A380 have been sold. This under-wing aircraft is the largest civil aircraft ever produced in series-production. The first aircraft was delivered to Singapore Airlines on October 15, 2007 in Toulouse. The first passenger flight took place on October 25, 2007.

About TITAL GmbH: TITAL supplies industry leading companies around the world in the field of aerospace, defence, motor sport and industrial systems with sophisticated aluminum and titanium investment casting products using the lost wax process. TITAL was founded in 1974 and in 2006 the management took over the company. Today the company employs 400 people with 2010 revenue of €48M or $63M. For more information visit their website at: www.tital.de or contact: Internal press contact: P. Jerusalem at Phone +49 (0) 2904 - 981 – 0 or External press contact: EWALD PRÜNTE KOMMUNIKATION at info@ewald-pruente.de

We Moved

Titanium Processing Center is proud to announce that we are moving to a larger facility. Please update your records accordingly.

Titanium Processing Center
51513 Industrial Dr.
New Baltimore, MI 48047
Phone: 586-716-7555
Fax: 586-716-8430
E-mail: denisez@titaniumprocessingcenter.com
miker@titaniumprocessingcenter.com
lisac@titaniumprocessingcenter.com
What’s New in Titanium?

TZMI is pleased to announce the release of its sixth detailed review of the global titanium dioxide minerals market titled “Titanium Feedstock Market Dynamics: Outlook to 2018”. This study provides a detailed supply/demand review for the titanium feedstocks market incorporating analysis and insightful comment of the ensuing two years since the previous study in 2008. The study also examines industry profitability and discusses some important points to consider regarding the financial performance of the titanium feedstock sector.

TZMI forecasts China’s share of global sulfate-route capacity to increase from a level of 44% in 2010 to an estimated 57% by 2018. Sulfate feedstocks demand will clearly benefit, with most of this volume growth led by a considerable increase in sulfate slag demand. Chloride feedstock consumption is also expected to grow, although at a lower rate and will be dominated by high TiO2 feedstocks.

Without the onset of new projects, resource depletion for existing operations will see total supply from existing producers decline to less than 6 million TiO2 units by 2018, which is below the global peak production in 2007. In tandem with resource depletion, the level of activity in investigating new sources of feedstock supply has also declined considerably in recent years and is at its lowest level since 1999.

Consumers of titanium feedstocks will need to have an awareness of associated issues discussed in the study when considering any strategy with respect to sourcing of feedstocks in the future.

For virtually all feedstock types, tight market conditions and increasing supply deficits from 2012 are suggested by TZMI’s supply/demand analyses over the next four years, unless a number of new projects can be commissioned by that date. Sulfate-grade feedstocks in particular are expected to be in tight supply over the next few years and over the long-term, even with the development of several new projects.

The global TiO2 sector is currently clearly more buoyant

Continued on Page 7
Shanghai office reflects the company’s “determination and enthusiasm to service its Chinese customers,” which involves both local enterprise and foreign investment. Establishing the Shanghai office also demonstrates that Ti Industries is attuned to the evolving requirements of offshore companies seeking to do business in China. According to Tien, the Chinese market is now focused on “high domestic demand” rather than simply carrying the label of being “cheap-labor intensive.”

Jeff Wise, Ti Industries’ vice president of sales and marketing, said the company has distribution centers in Taipei and Bangalore, India. The Shanghai office reports to Taipei, which in turn reports directly to Wise. He indicated that, in addition to metal sales and marketing in Shanghai, the company’s long-range plan is to ramp up its distribution and value-added operations.

Ti Industries will compete aggressively in China and the larger Asian market by bringing “an understanding of value-added services and metal distribution to users of titanium and high-performance metals,” Wise declared, noting that metal distribution channels are still in the early stages of the growth curve. “Until a few years ago, distribution of metals in China wasn’t even largely considered,” he continued. “China has 1.3 billion people and is now the world’s second-leading economy behind the United States.”

Outlining the company’s regional business strategy for Asia, Wise said the Shanghai office represents Ti Industries’ desire to serve its existing global customer base as well as explore new business prospects. “There are core global customers whom we service and many of them are either expanding their own operations into China or sourcing more from that part of the world,” he explained. “We need to be there to support them. There is also a significant, growing demand for infrastructure and industrial applications within China, such as power plants, refineries and aerospace. We want to be there to service that demand.

“I have seen the cultural and economic evolution of China over the past 20 years,” Wise continued. “The Chinese people are educated, very warm and friendly and embrace new technology and ideas.” Regarding China’s business culture, Wise said Chinese industrial engineers and entrepreneurs value “attention to detail.”

For more information visit www.titanium.com or contact Alexis Zhu, Titanium Industries Inc., Room 1819, Shui on Plaza, 333 Huaihai, Road Middle, Shanghai, 200021 China
Tel: +86 21 6137 7837; Fax: +86 21 6137 7836
Mobile: +86 13636682827;
E-mail: azhu@titanium.com
What's New in Titanium?

UNITI Selected to Supply Titanium for Desalination Project
Continued From Page 1

history. Shipments are planned to be spread evenly throughout 2011.

UNITI’s customer, Doosan Heavy Industries & Construction of Korea, was selected by the Saline Water Conversion Corporation (SWCC) for a seawater desalination project to be built in Ras Az Zawr, Saudi Arabia. The plant’s daily potable water output will be the largest in the world, sufficient to meet the needs of 3.5 million people.

This news release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements are based on management’s current expectations and include known and unknown risks, uncertainties and other factors, many of which we are unable to predict or control, that may cause our actual results, performance or achievements to materially differ from those expressed or implied in the forward-looking statements. Additional information concerning factors that could cause actual results to differ materially from those projected in the forward-looking statements is contained in Allegheny Technologies’ filings with the Securities and Exchange Commission. We assume no duty to update our forward-looking statements.

UNITI does not supply aerospace, military or medical products. These products continue to be produced and sold by UNITI’s partners. The unmatched capabilities of UNITI stem from the synergistic combination of the raw material, melting, hot rolling, finishing, research, and technology resources of the two companies. The UNITI website is www.Uniti-titanium.com.

Solar Manufacturing Ships High Performance Furnace to Major Aircraft Engine Manufacturer

Solar Manufacturing recently shipped a high performance vacuum furnace to be used by a major aircraft engine manufacturer. The furnace, which incorporates super cooling and high temperature capabilities, will be used for research in heat treating and further development of super alloys for new and existing applications in the aircraft engine industry.

The vacuum furnace is a Model HFL-2624-10IQ horizontal front loading system with a work zone that measures 18" wide x 14" high x 28" deep and a load capacity of 500 pounds. “The hot zone incorporates a combination of 0.075" thick CFC graphite hot face backed by multiple layers of high purity graphite felt allowing for an operating temperature up to 2800°F,” explained Pete Reh, vice president of sales. “The durable, curved graphite elements provide for rapid and uniform heating; and the vacuum system will allow for operation in the 10-5 Torr range or better,” he added.

According to Reh, the high velocity gas cooling system will be capable of quenching at pressures up to 10 bar positive. The cooling system will consist of a 100 HP blower motor; a variable frequency drive; an all-copper, water-cooled, fin and tube heat exchanger; and unique, tapered graphite gas nozzles which surround the workload.

Solar Manufacturing designs and manufactures all types of vacuum heat treating, brazing, sintering, carburizing, and nitriding furnaces. They also offer replacement hot zones and spare parts for various vacuum furnace brands. To learn more about the Solar Manufacturing’s diverse product line and services, contact Pete Reh, vice president of sales, at 267-384-5040 or pkr@solarmfg.com

Allegheny Technologies Incorporated is one of the largest and most diversified specialty metals producers in the world with revenues of $3.8 billion for the twelve months ending September 30, 2010. ATI has approximately 8,900 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, and niobium, tungsten materials, and forgings and castings. The Allegheny Technologies website is www.ATImetals.com.

UNITI is a joint venture of Allegheny Technologies Incorporated (ATI) from the United States and Verkhnaya Salda Metallurgical Production Association (VSMPO) of Russia, two leading global titanium producers. UNITI is a supplier of titanium mill products primarily for industrial markets, including power generation, petrochemical, desalination, and other industrial applications.
What’s New in Titanium?

Independent Supply/Demand review released
Continued From Page 6

than at any other time in the last 10 years, supported by strong pigment market pricing. This in turn is likely to flow down to the minerals sector, where similarly sub-standard returns have been occurring for many years. Current market conditions are exacerbated by low inventory levels of pigment and current production capacity being closely matched to market demand. There will likely be some inventory build by pigment producers during the northern hemisphere winter, but this could be curtailed by pigment customers continuing to purchase inventory ahead of future price increases.

For more information or to order a copy of TZMI’s Titanium Feedstock Market Dynamics: Outlook to 2018, visit www.tzmi.com.

About TZMI: TZ Minerals International Pty Ltd (TZMI) is an independent consulting and publishing company, established in 1994, with offices in Australia, the USA, Europe, South Africa and China. TZMI is comprised of four operating divisions and subsidiaries, providing specialist services to the following industries:

- Mineral sands and zircon
- Titanium dioxide pigment and titanium metal
- Iron ore and ferrous alloys
- Specialty chemicals for the global paints & coatings industry.

Two associated companies, in which TZMI has a shareholding, provide ancillary services to these industries and augment the offerings of TZMIs other divisions are:

- Allied Mineral Laboratories (AML), providing test work, product assessment and flowsheet development for mineral sands, iron ore and other heavy mineral deposits;
- Ferrum Consultants, market consultants in ferrous metallics.

The TZMI team has decades of cumulative production and consulting experience across the commodities value chain, from resource estimation to divestment, and the depth of skills enables advice to be provided ranging from high-level strategic M&A decision support to operationally-focused plant optimisation. TZMIs Publications and Data Services support its consulting activities. From a free weekly news service to sector-specific periodicals and data matrices, multi-client studies and annual industry reviews, the TZMI Group offers a comprehensive suite of products and subscription options suitable for all industry participants. For more information contact: Tracey Kelly, Business Development and Marketing Manager, TZMI, P: +618 9359 6000, tracey.kelly@tzmi.com

VSMPO Announces Expansion
Continued From Page 1

and the medical market is a steady growth business” according to Mikhail Voevodin, General Director of VSMPO. “Our customers are telling us that they are very interested in our new products.”

The new facility is expected to be operational in late Q1 2011, and has an initial capacity of approximately 500 MT annually with the option to increase that quantity should the market demand require additional production. When the current expansion is completed the company will be able to supply customers with small diameter bar and wire in coil form, and precision tolerance straight length bar. Coiled bar and wire will be available with or without a lubricated coating, depending on the customer requirements. Precision tolerance centerless ground straight bar will meet the increasingly tight standards of the industry today.

VSMPO also announced that it has entered into a long term agreement with Universal Stainless and Alloys Products (NASDAQ: USAP) to supply hot roll conversion services for NF&M in conjunction with the expansion of the facilities at NF&M.

VSMPO is based in the Sverdelosk region of Russia and is the largest manufacturer of titanium in the world.

The company is fully integrated from sponge manufacturing through melting and mill products and has quality approvals from over 300 companies around the world in a wide variety of industries. VSMPO also produces forged parts primarily for aerospace applications. The company has extensive relationships in the aerospace industry with both airframe and engine manufacturers, as well as the medical industry and markets its corrosion resistant products through its joint venture Uniti.
JOIN US! TITANIUM 2011 will give attendees many opportunities to exchange ideas with industry leaders and gain invaluable insight into the global state of the titanium industry. Please respond by clicking either the Yes or No button at the bottom of the invitation. We look forward to your response.

Sincerely,
Jennifer Simpson, Executive Director
Executive Director
International Titanium Association

WHEN
Sunday, October 02, 2011 5:00 PM - Wednesday, October 05, 2011 10:00 PM
Pacific Time

WHERE
Sheraton San Diego Hotel & Marina
1380 Harbor Island Drive, San Diego, CA 92101 USA

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Last Chance - TITANIUM 2011 Call For Papers

The International Titanium Association (ITA) is now accepting Call for Papers abstract submissions for the upcoming TITANIUM 2011 Conference held October 2-5th at the Sheraton San Diego Hotel & Marina.

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. Please include sufficient detail for fair evaluation of the proposed paper and presentation and indicate which of the following panels you would prefer to participate:

World Titanium Industry
Supply Trends
Commercial Aerospace
Military / Defense
Automotive
Medical
Industrial
Economy / Finance
Energy Exploration and Production
Mining
Manufacturing Technology
New Materials
Consumer / Recreation / Architectural
Other: Please Specify

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.

We encourage participation from students as well as professionals. The deadline to receive general session panel sponsorships or abstracts is April 15, 2011.

More details about the upcoming event will be distributed soon. Thank you for your continued support and participation in the annual TITANIUM Conference.
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.

**Benefits of this course include:**

- Students receive a certificate of completion from the International Titanium Association. Students will have 16 weeks to complete the course at their own pace and leisure.
- This is the only course of its kind dedicated to titanium metal
- Learn from one of the founding fathers in the titanium industry — Stanley Seagle, Mr. Seagle has been involved for 40 years in all aspects of titanium technology.

**Cost is only**

- $249 for ITA Members
- $325 for Non-Members

To learn more about this exciting new workshop visit: [www.titanium.org](http://www.titanium.org)
Job Posting:

**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 is a must.

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

Details of the classified ads can be found on the ITA website at www.titanium.org.
1. Experience with different melt processes, preferably Titanium (e.g. Plasma / EB hearth melting, VAR) and related equipment characteristics.

2. Conversion processes (forging, rolling, GFM …) and related equipment characteristics (hydraulic press, GFM, rolling mill, forge / HT furnaces, peelers, UT machines).

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

4. 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

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**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.

Location: Pittsburgh, PA area.

Send Resume to: humanresources@vsmpo-tirus.com

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**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.

Contact Elizabeth Mabie, Manager, Corporate HR, RTI International Metals at 412-893-0037 or email emabie@rtiintl.com

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**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

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**Manager Product Management Position**

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
Classified Ads

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

Send brief resume to: mabkowitz@dynamettechnology.com

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Material For Sale:

Titanium Mill Products And 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

C.P. Titanium rod/wire, gr. 2 and gr. 3 FOR SALE
diam. 2 and 3 mm, rod of 1m each and on spools 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, 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

Contact: 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. 1. 1.8*1000*2000mm 2195kgs/137pcs ASNA 3200E
Gr. 1. 1.6*914.4*2438181kgs/11pcs MIL-T-9046J/AMS 4911H/ DMS1592F/ASTM B265
Gr. 1. 1.8*914.4*2438 692kgs/38pcs MIL-T-9046J/AMS 4911H/ DMS1592F/ASTM B265
Gr. 1. 1.8*914.4*3048 136kgs/6pcs MIL-T-9046J/AMS 4911H/ DMS1592F/ASTM B265
Gr. 1. 2.03*914.4*2438 992kgs/50pcs MIL-T-9046J/AMS 4911H/ DMS1592F/ASTM B265
Gr. 1. 2.03*914.4*3048 537kgs/21pcs MIL-T-9046J/AMS 4911H/ DMS1592F/ASTM B265
Gr. 1. 2.286*914.4*2438 639kgs MIL-T-9046J/AMS 4911H/ DMS1592F/ASTM B265
Gr. 1. 2.286*914.4*3048 529kg/18pcs MIL-T-9046J/AMS 4911H/ DMS1592F/ASTM B265
Gr. 1. 6.35*914.4*3048 241kgs/3pcs MIL-T-9046J/AMS 4911H/ DMS1592F/ASTM B265
Gr. 1. 0.813*914.4*2438 750kgs MIL-T-9046J/AMS 4911H/ DMS1592F/ASTM B265
Gr. 1. 0.813*914.4*3048 460kgs MIL-T-9046J/AMS 4911H/ DMS1592F/ASTM B265
Gr. 1. 1.27*914.4*2438.4 500kgs MIL-T-9046J/AMS 4911H/ DMS1592F/ASTM B265
Gr. 1. 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
Add:No.21 Quanfa Road, Wuqing development zone, Tianjin,China
Tel:0086-22-82173366 * Fax:0086-22-82101337
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: 00-12-00, Fax: 00-12-11, Email Address: hailonggood@1.com

Titanium sale! Well below market prices!

Trans World Alloys, a large stocking metal distributor, is pleased to offer Titanium .65" round bar 64-ELI for below market prices. The material is of U.S. domestic origin and comes with full mill certifications and traceability. The bar is 96"-180" random lengths. The material meets MILT9047, AMST9047, & AMS4930.

Not quite the size you need? We also offer value added services such as conversion to any size you may need. Material is excess to our needs and is priced for rapid sale!

Call us now @ 310-217-8777. We will ship anywhere in the world!

Services:

Online Titanium And Specialty Metals Clearinghouse – www.directalloys.com

Direct Alloys LLC
01 Broad Street
Utica, NY 13501
Phone: 1-315-883-1991
Fax: 1-315-292-1088
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:

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 or Tel: (800) 258-8180

ITA Members are welcome to post Classified Ads FREE. Please email sblicker@titanium.org
<table>
<thead>
<tr>
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<tbody>
<tr>
<td><strong>ITA President:</strong></td>
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<tr>
<td>Michael G. Metz</td>
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<tr>
<td>President, Tirus US</td>
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<tr>
<td>VSMPO Tirus US</td>
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<tr>
<td><strong>ITA Secretary / Treasurer:</strong></td>
</tr>
<tr>
<td>Dawne S. Hickton</td>
</tr>
<tr>
<td>Vice Chair, President &amp; CEO</td>
</tr>
<tr>
<td>RTI International Metals, Inc.,</td>
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<tr>
<td><strong>ITA Vice President:</strong></td>
</tr>
<tr>
<td>Brett S. Paddock</td>
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<tr>
<td>President &amp; CEO</td>
</tr>
<tr>
<td>Titanium Industries, Incorporated</td>
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<tr>
<td><strong>ITA Past President:</strong></td>
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<tr>
<td>Frank Perryman</td>
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<tr>
<td>President and Chief Executive Officer</td>
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<tr>
<td>Perryman Company</td>
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<tr>
<td><strong>ITA Director:</strong></td>
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<tr>
<td>James M. Buch</td>
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<tr>
<td>Vice President Commercial</td>
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<tr>
<td>TIMET, Titanium Metals Corporation</td>
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<tr>
<td><strong>ITA Director:</strong></td>
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<tr>
<td>Markus Holz</td>
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<tr>
<td>Managing Director</td>
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<tr>
<td>HEMPEL SPECIAL METALS GmbH</td>
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<tr>
<td><strong>ITA Director:</strong></td>
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<tr>
<td>Daniel P Buwalda</td>
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<tr>
<td>Plant Manager</td>
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<tr>
<td>Alcoa Power and Propulsion</td>
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<tr>
<td><strong>ITA Director:</strong></td>
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<tr>
<td>Lawrence D Buhl III</td>
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<tr>
<td>CEO</td>
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<tr>
<td>Lawrence Holdings</td>
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<td><strong>ITA Director:</strong></td>
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<tr>
<td>Hunter R. Dalton</td>
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<tr>
<td>President</td>
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<tr>
<td>ATI Allvac</td>
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<tr>
<td><strong>ITA Director:</strong></td>
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<tr>
<td>William B. Kent</td>
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<tr>
<td>Vice President Dynamet &amp; CPP</td>
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<tr>
<td>Dynamet Incorporated</td>
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<tr>
<td><strong>ITA Director:</strong></td>
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<tr>
<td>Edward J. Newman</td>
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<tr>
<td>Senior Vice President</td>
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<tr>
<td>Keywell LLC</td>
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<tr>
<td><strong>ITA Director:</strong></td>
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<tr>
<td>Jerry St. Clair</td>
</tr>
<tr>
<td>President</td>
</tr>
<tr>
<td>Vulcanium Metals Incorporated</td>
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<tr>
<td><strong>ITA Director:</strong></td>
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<tr>
<td>Graham P. Walker</td>
</tr>
<tr>
<td>Vice President &amp; General Manager</td>
</tr>
<tr>
<td>Reading Alloys Inc., an AMETEC Co.</td>
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</table>
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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
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  - ATI Allegheny Ludlum
  - ATI Allvac
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  - ATI Wah Chang
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- Monico Alloys, Incorporated
- Rolled Alloys
- RTI International Metals, Inc.
  - RTI Claro
  - RTI Energy Systems
  - RTI Fabrication
  - RTI Niles
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  - Alloy Metals Inc.
  - Snappy Materials LLC
  - Supra Alloys Incorporated
  - TICO Titanium Incorporated
- TIMET, Titanium Metals Corporation
  - Loterios SpA
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- Titanium Industries, Incorporated
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- United Titanium, Inc.
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- Cristal USA Inc DBA International Titanium Powder
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- GfE Metalle und Materialien GmbH
- Grandis Titanium
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- President Company, Ltd.
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- Spectore Corporation
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- Zak, Incorporated

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- Excelco Developments Incorporated
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- Perryman Company
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  - VSMPO Tirus UK Ltd.
  - VSMPO Titan Ukraine Ltd.
  - VSMPO-Tirus, US

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- AlloyWorks, LLC
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Uniti Titanium
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Chaoyang Jinda Titanium Co Ltd
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CSIRO, Titanium Technologies
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GIE Media
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Founded in 1984, the International Titanium Association is a nonprofit networking trade association for the titanium industry. Current membership includes over 170 organizations.