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About the Association

The International Titanium Association (ITA) is a nonprofit networking trade association for the titanium industry. Established in 1984, the Association’s mission is to connect the public interested in using titanium with titanium specialist all over the world who may offer technical and sales assistance. The ITA also offers titanium literature and sponsors a variety of events such as educational workshops, seminars, and the annual TITANIUM Conference and Exhibition. The Association currently has 195 member companies worldwide.
Perryman Company Selects Shaanxi Fuyuan International for Chinese Representation

HOUSTON, PA – August 15, 2008 – Perryman Company announced today that it has selected Shaanxi Fuyuan International (SFI) for representation of its products in China. SFI’s responsibilities will include exploring new opportunities for Perryman as well as maintaining existing relationships.

According to Frank Perryman, Partner, Perryman Company, “SFI’s unparalleled knowledge of the marketplace and attention to customer service makes them a perfect fit to represent Perryman Company in China. We’re pleased to be able to align ourselves with SFI and to continue to be able to expand our reach to better serve our far away customers.”

Founded in 1999, SFI is located in Xi’an, Shaanxi China. The company is one of the leading distributors of titanium in China and also offers stainless steel, cobalt, and nickel products. SFI prides itself on its customer relationships, knowledge of the product, and quick deliveries.

Perryman Company is headquartered in Houston, Pennsylvania, with additional manufacturing in California, Pennsylvania and sales offices in Philadelphia, Los Angeles, and London. A manufacturer of specialty titanium products, the company is a supplier to the aerospace, medical, recreational, and automotive markets. Perryman Company is a worldwide leader in the titanium industry with bar, coiled rod, net shapes, hot rolled products, and ingot.

For more information contact:
United States: Jessica Scott, Phone: 724-746-9390 or email jscott@perrymanco.com
China: Wang Jiping, Shaanxi Fuyuan International, Phone: 29-8835-0761, wjp@specialmet.com

New Sales Manager Named For Master Alloys Used In Titanium

DANBURY, Connecticut, June 20, 2008, — Vincent P. Rocco has been named Sales Manager for the master alloys that Stratcor, Inc. sells to the titanium industry. Stratcor, Inc., whose sales office is located in Pittsburgh, Pennsylvania, is a subsidiary of Strategic Minerals Corporation, part of the Evraz Group of Russia.

In his new position, Mr. Rocco will be responsible for the sales of Stratcor® vanadium-aluminum and other master alloys that provide strength and other properties to titanium alloys used in aerospace and other critical applications. These products are produced in a state-of-the-art plant operated by Kennamental / International Specialty Alloys in New Castle, Pennsylvania.

Mr. Rocco brings 14 years of experience in the metals industry to his new position. He has held sales-and-marketing positions at a prominent steel-industry engineering company and at a major industrial-bearing and seal manufacturer where his primary focus was serving metals producers. He is a graduate of The Pennsylvania State University with a B.S. degree in aerospace engineering. He also earned his M.B.A. from the University of Pittsburgh where he focused on marketing and strategic planning.

Mr. Rocco can be contacted at the Stratcor, Inc. office in Pittsburgh Pennsylvania by calling +1 412 787 4500 or by using the “Contact Us” form on www.stratcor.com.
Cristal Global and International Titanium Powder (ITP) Announce Purchase Agreement

Hunt Valley, MD and Woodridge, IL (July 16, 2008) - Cristal Global’s wholly owned subsidiary, Cristal US, Incorporated (Cristal US) and Titanium Company of America, LLC (TICOA) announced today a purchase agreement in which Cristal US intends to purchase 100% of TICOA’s interest in International Titanium Powder, LLC (ITP), a private Illinois-based limited liability company specializing in the production of high-purity titanium and titanium alloy powders.

ITP was established in 1997 to commercialize the Armstrong Process, a proprietary, patented process for the low-cost production of high-purity titanium and titanium alloy powders. ITP operates a Research and Development facility and a pilot plant in Lockport, Illinois. ITP has broken ground on a four million pound per year production facility in Ottawa, Illinois.

ITP and Cristal US are making the appropriate regulatory filings for this acquisition.

ITP CEO Stan Borys said, “ITP’s vision has been to create a new powder-based titanium value chain. We believe that Cristal US is a superior fit for ITP and that this acquisition will help ensure the timely commercial launch of the Armstrong Process.”

Robert Daniels, Vice President - Titanium Metals for Cristal US, said, “The acquisition of ITP allows us to further our strategy of participating in various businesses in the titanium value chain. We believe that the combination of the breakthrough Armstrong process, coupled with Cristal Global’s expertise in titanium technologies, markets and business management, will provide significant value to our customers and owners.”

Cristal Global is the world’s second-largest producer of titanium dioxide and a leading producer of titanium chemicals. Cristal Global operates eight manufacturing plants in six countries on five continents and employs more than 3,500 people worldwide.

Unique Seamless Titanium Tubes

FAE is an Argentine company that manufactures seamless zirconium alloy tubes for nuclear and chemical applications, seamless nickel alloy and special stainless steel tubes for nuclear and oil & gas industries, and seamless titanium tubes for non corrosive equipments and the aerospace activity.

FAE is one of the few enterprises that have the facilities and know how to produce long seamless titanium tubes.

In June 2008, FAE exported a very important quantity of heat exchanger seamless titanium tubes to Italy. These seamless titanium tubes are unique because they are more than 60 feet long.

FAE’s customer, Officine Resta, is one of the most important European heat exchanger manufacturers.

The tubes were rolled, heat treated and ultrasonically tested according to specifications given by Officine Resta. The tubes were specially packaged and shipped to Italy, where the tubes were finally bent.


Baoji First Titanium Industry Co., Ltd.
New Location

New address:
2-2105 room, D Buiding, GaoKe Plaza Gaoxin 4th Street, Xi'an, Shaanxi, China
New telephone:0086-29-62960783
New fax:0086-29-62960783
Email: shaanxiti@hotmail.com
Distinctive Jewelry Designs by Spectore Corporation

The summer of 2008, with soaring costs for gasoline, food, and even precious metals, has consumers facing some challenging lifestyle decisions. For luxury item purchases, however, many buyers are exercising their freedom of choice in favor of contemporary metals jewelry. Spectore Corporation has once again made a fashion statement with its introduction of the “I Feel Free” collection by Edward Mirell, entirely designed and manufactured in the United States.

Independent thinkers are at liberty to choose from a medley of metal combinations. Items are offered in black or grey titanium, black sapphire, stainless steel, or additional unconventional jewelry metals accented with diamonds or other seductive stones. A variety of lifestyle jewelry, such as those depicting the Orange County Choppers, also adds to the mix. Alternatives in design, in metals, and in competitive pricing, allow the savvy shopper freedom of choice with which to declare individual style and distinction. This sense of “freedom” has endorsed an impressive effect on Spectore’s sales and market penetration.

Known for its many introductions of new technology into the jewelry industry, Spectore is on the verge of launching yet another product line to broaden its assortment of contemporary metals. This, in combination with its fashion-forward approach to design, further establishes the company as a reputable US-based jewelry manufacturer. Even in unstable economic times, Spectore continues to escalate both in its expansion of product offerings and in market dominance.

Get ready to express your freedom of choice in contemporary metals jewelry! Visit the website at www.spectore.com.
How One Independent Test Lab Meets the Demands of Global Competition.

Company/Organization
Westmoreland Mechanical Testing and Research, Inc.

Westmoreland Mechanical Testing and Research, Inc. has established a global reputation for excellence and innovation in the field of material testing. Since its founding in 1967, Westmoreland Mechanical Testing & Research, Inc. remains committed to one basic principle: In Serving Our Customers Better, We Help Them Serve Their Customers Better!

In support of our strategic mission, the laboratories of WMT&R are organized into seven advanced groups: Mechanical Testing, Stress Rupture and Creep Testing, Fracture Mechanics, Physical Metallurgy Group, Fatigue Testing, Chemical/Analytical Group, and the Manufacturing Technologies Division (specimen preparation including low stress grinding and polishing). Materials tested includes: Intermetallics; Composites; Plastics; Powdered Metals; Superalloys and Tool Steels.

Technology and Service Description
Westmoreland Mechanical Testing & Research, Inc., is focused, Company wide, on utilizing (and in many cases developing and deploying) cutting-edge software and hardware to conduct material and mechanical testing.

Our in-house staff of programmers and hardware technicians maintains a vast network of administrative, production, testing, and research computer systems. In addition to testing applications, Web development initiatives are supported, in-house, to provide customer’s with real-time status of their projects, and secure (Verisign ®) test results.

The Data Management staff works closely with our Engineering and Technical Support Teams to design and write innovative, one of a kind, testing software to meet unique customer requirements. Having this capability onsite greatly reduces the turnaround time from concept to results, which supports your goal for shorter turnaround times for your stakeholders.

Facilities
Over 150,000 sq. ft. of production and testing capacity is designed to ensure minimum turnaround times on projects, large or small. This state-of-the-art testing facility is located in Youngstown, Pennsylvania and is staffed by experienced professionals in metallurgy, mechanical engineering, computer programming, chemistry and electronics. In addition to standard testing at temperatures ranging from -423°F to over 2100°F, WMT&R has the proven ability and resources to custom design tests for special applications such as finished parts, odd shapes, and exotic materials.

Fracture Toughness tests can be performed on servo machines which cover a range of load capacities up to a 1,000,000-lb. For unique testing requirements, the flexibility and resources to accommodate a wide range of sample sizes are available, with machine capacity ranges from 25 Grams to 1,000,000 lbs.

WMT&R has established a global reputation in the field of Fatigue Testing. Substantial on-site capabilities allow your project teams and WMT&R staff to customize testing from design of experiment to specialized fixturing. Access to over 210 servo-hydraulic test frames means your demands for quick turn-around times can be met. Fatigue testing can now be part of a competitive advantage for you, your Alliance Partners, and stakeholders as well.

Compatible Mission & Supportive Capabilities
WMT&R is an approved testing facility for all the major aerospace defense primes including: Boeing; Lockheed-Martin; G.E., Pratt and Whitney; Northrop-Grumman; Bell Helicopter; Honeywell; Sikorsky; and Alliant Techsystems. Testing accreditations include ISO-17025 and NADCAP.

For more information visit their website at: www.wmtr.com
TiFast Completes Fully Integrated Production Facility

With the beginning of the year 2008 European Titanium Company TiFast definitely arrived to the completion of its starting up phase and now possesses the facilities that are completely functional. This important goal has been achieved thanks to the long experience and knowledge of TiFast team in titanium making.

Created as a semi-integrated company TiFast now has two completely functional melting furnaces with a total capacity of 2000 Tons/year and capable to produce ingots of whatever composition needed, on demand. The technology of this furnace is unique in the world as it permits to multiply the possibilities of production by feeding the furnace with titanium sponge and/or titanium scrap in order to achieve flexibility of production process and best product quality.

As a second stage of its in home production TiFast completed its rolling mill, it is a highly automatic unit of the last generation for the production of bars and rods. It is a combined plant composed of: roughing mill, continuous mill, rods line and furnaces and permits to have 100% control of the quality of the product through computerized continuous check of reduction, temperature and any metallurgical requirement.

The last very important step of the completion and integration of production was made by TiFast in the finishing department. TiFast now has its own finishing lines for all the products offered to the customer and produces as rolled heat treated semi-finished wire rod and heat treated, straightened, peeled or centerless ground finished bars.

The feedback from customers and market in general confirms that the initial idea of creating in Europe a company with a new approach to the production of Titanium products is correct. While elsewhere a few companies had coped with the specialization on Titanium making, in Europe this type of production was traditionally considered as marginal and occasional and carried on by steel makers on the same plants used for steel or super-alloys.

This caused troubles in the organization of the work, a broad usage of toll-working, the difficulty of acquiring a specialized know-how on the product, dependency from suppliers of materials and services, long delivery times, high prices. This hampered the expansion of traditional application of Titanium alloys and kept emerging usages in a painstakingly slow stage of development.

Paying particular attention to the quality of the products the company organized and activated its quality system in the way to satisfy the international quality requirements and quality management standards and now is certified with UNI EN ISO 9001:2000.

It also co-operates with a range of companies active in medical and aerospace applications to obtain necessary certifications to work also in those fields.

Continuous research and development, fast and continuous production control contribute to the high technical value of the company which is able to support customer also in developing new applications.

Nowadays TiFast is able to satisfy all the requests of the industrial market paying particular attention to the quality, pricing strategy and fast and efficient assistance of its clients.

Specialty Metals Processing Inc. New Location

Specialty Metals Processing Inc. (aka SMP) a toll processor of nonferrous metals, has closed its Akron, Ohio sheet & plate facility and moved it into it’s new state of the art, climate controlled facility in Stow, Ohio. The 160,000 sq. ft. facility will house all of their coil, sheet & plate processing under one roof. Current processes include slitting, cut-to-length, buffing, polishing, & grinding. A 72” wide precision blanking line with edge trim is currently being installed and will be ready to accept orders in September. SMP is rapidly expanding and will have 18 processing lines under one roof by the end of this year.

The new address is:
837 Seasons Road
Stow, Ohio 44224

Beamalloy Technologies, LLC Announces Issuance of a New Patent

Beamalloy Technologies, LLC announces issuance of a new patent covering its advanced ion beam enhanced deposition (IBED) coating process technology. US patent #7,374,642 issued on 5/20/2008 and describes the new “Treatment Process for Improving the Mechanical, Catalytic, Chemical, and Biological Activity of Surfaces and Articles Treated Therewith.” The newly patented IBED technology enables direct coating of the surfaces of titanium and all titanium alloys with a variety of metallic (Cr, Ni, Ag, Au, Cu, Al, Ti) and non-metallic (Cr2N, TiN, Al2O3) materials to enhance wear-, corrosion-, and surface fatigue resistance as well as other surface-related properties. The patented Beamalloy advanced IBED coating process offers many advantages compared to hardcoat anodizing, plating, and PVD coating.

1. Low Temperature: Since IBED is a physical—not a chemical or thermal process—coating adhesion and growth is achieved without the external application of heat. Processing temperatures can be held well below 200°F (93 °C) if desired, so there is no danger of dimensional distortion or tempering of precision components during coating.

2. A Variety of Substrates Can be Coated: Since IBED coatings are metallurgically bonded to the substrate, there is no practical limit to the types of materials that can be coated including titanium and all titanium alloys as well as all other ferrous and non-ferrous metals. This allows flexibility in component design when trying to optimize both bulk and surface properties.

3. A Variety of Coatings Can be Deposited: Metallic coatings including but not limited to Cr and Ni, and hardcoatings including TiN and Cr2N are deposited directly without the need for any mechanical or chemical pretreatments. Usual thicknesses for precision components are in the range of 1 to 10 microns.

4. No Regrinding or Repolishing Required: IBED coatings replicate the original surface on which they are deposited—regardless of whether the surface is highly polished or textured. Thus, there is no need for post-coating regrinding, repolishing, or retexturing.

5. Highly Repeatable Properties: Since the nanostructure of IBED coatings is highly uniform, the coatings are free of voids and pinholes, they exhibit improved adhesion and cohesion, and the mechanical properties of IBED-deposited coatings are better than the equivalent coatings deposited by plating or PVD. And the coating properties are highly repeatable—a must for volume production of precision components.

Beamalloy Technologies, LLC operates a full-service Coating Center specializing in providing IBED surface treatments on an industrial scale for precision manufacturing tooling and engineered mechanical components. The Company operates in a stand-alone 12,000 square foot building in Plain City (Columbus), Ohio. The facility houses both production and R&D IBED coating systems, and an on-site materials testing and analysis laboratory. For more information visit their website at: www.beamalloy.net

Now Available!

International Titanium Association

Published by the International Titanium Association, the Statistical Review is a compilation of titanium statistics, organized by the ITA from government and trade association data. The publication includes a full range of industry statistics including Canada, China, European Union, Japan, Russia, Taiwan, and USA. Published annually, the Statistical Review includes information from the new Harmonized System.

ITA Members: Log into the ITA Website using your User name and Password to download your copy of the report under navigation bar: “FREE Publications to ITA Members”

Non Members: $75
RathGibson Titanium Tubing to be Installed in India’s US$4.2 billion Tata Mundra Project

Lincolnshire, IL – RathGibson, a leading manufacturer of welded, welded and drawn, and seamless stainless steel, nickel, and titanium tubing, has been chosen by the Engineering Firm of Larsen & Toubro to supply titanium welded tubing for the Tata Mundra Project in India. Larsen & Toubro is providing condensers to the Tata Mundra Project, a 4,000 megawatt power plant that will be built near the city of Mundra, in the state of Gujarat.

“RathGibson was awarded this project based upon our high-quality products, dedication to customer service, and cost-effectiveness,” said Alfredo D’Souza, Director – Business Development, Middle East & India. “Our commitment to the region has resulted in increased education and technical support for our channel partners and end-users. We are excited to witness the exponential expansion in this area and are proud to contribute to that development.”

Developed by Coastal Gujarat Power Limited, the Tata Mundra Project will provide power to over 16 million customers in the states of Gujarat, Rajasthan, Maharashtra, Punjab, and Haryana. The plant, an answer to the country’s energy shortage, will contribute to India’s domestic growth and commercial competitiveness.

This project is India’s first private power plant to use supercritical technology. The term “supercritical” refers to the state of water when it cannot be clearly defined as a liquid or a gas. By achieving this supercritical state, the efficiency of energy generation is increased while emissions are greatly decreased.

RathGibson is a worldwide manufacturer of highly engineered stainless steel, nickel, and titanium tubing for diverse industries such as chemical, petrochemical, power generation, energy - oil and gas, food, beverage, pharmaceutical, biopharmaceutical, medical, biotechnology, and general commercial. RathGibson’s corporate headquarters are located close to Chicago in Lincolnshire, Illinois. Manufacturing locations include: Janesville, Wisconsin, North Branch, New Jersey, Clarksville, Arkansas (Greenville Tube), and Marrero, Louisiana (Mid-South Control Line). In addition to the sales offices in Janesville, North Branch, and Marrero, RathGibson has also strategically placed sales offices in Houston, TX; Shanghai, China; Manama, Bahrain; Knoxfield, Australia; Seoul, South Korea; Mumbai, India; and Singapore.


Do You Require Titanium Welding Wire?

Call Grandis Titanium’s Glenmont, Ohio office and talk with our Director of Wire & Bar Sales, Shawn Young. Shawn has over 27 years experience in the manufacturing and selling of titanium wire and bar products. He will professionally assist with your material requirements.

Our most common Grades of wire in stock include, (but not limited to): CP Grades 1,2,3 & 4 to the ASTM, AWS & AMS specifications.

Ti Grades 7 & 12 to the AWS ERTi requirements.

Ti 6Al/4V & Ti 6Al/4V Eli to the ASTM, AWS & AMS specifications.

Our diameters in stock include: 0.031”, 0.035”, 0.045”, 0.062”, 0.078”, 0.093”, 0.118”, 0.125” & 0.156”

Diameters from 0.118” and larger are typically 36” cut lengths, but we can manufacture to your specified length. We offer both spooled and cut lengths from .093” and smaller.

Inventory is located at our corporate offices warehouse in Foothill Ranch, California.

For your next project or customer’s inquiry that requests titanium wire or bar, give Grandis Titanium’s Glenmont, Ohio office a call and talk with Mr. Shawn Young. Phone: (330) 473-7765 Fax: (330) 378-5131, Email: shawn@grandis.com

Grandis Titanium homepage: www.grandis.com
Our online stock-list: www.ti4sale.com
SHEETS, BARS and PLATES are also in stock.
DYNAMET TECHNOLOGY’S INNOVATIVE ALLOYS NOW UNDER EVALUATION PROMISE NEW TITANIUM APPLICATIONS

More Reliable Alloy for Thin-Wall Aircraft Hydraulic Tube

Dynamet Technology (Burlington, MA) has been awarded a Phase I SBIR contract by the Naval Air Systems Command (NAVAIR) for the development of Dynamet’s innovative damage-resistant titanium alloys for use as hydraulic tubing for the Marine Corp’s V-22 OSPREY and other aircraft tubing applications. Dynamet’s advanced powder metal based titanium alloys have the potential of improving the reliability of the thin-wall hydraulic tubes that are critical to the functioning of the aircraft’s control systems.

Taking Weight out of the Marine Corp’s EFV

Dynamet Technology is currently scaling up its promising manufacturing technology for the production of low-cost titanium alloy cast and forged components for the Marine Corp’s advanced amphibious landing craft, the Expeditionary Fighting Vehicle (EFV). This R&D will build on the successful results achieved in a Phase I study. This Navy sponsored Phase II SBIR is aimed at reducing the weight and improving the reliability of the EFV by the substitution of titanium for steel in critical components.

NIH Phase I SBIR Promises New Dental Implant Alloy

Dynamet Technology has been awarded a Phase I SBIR grant by the National Institutes of Health (NIH) for the development of Dynamet’s new high strength titanium-tungsten alloys to meet the demands of next generation dental implants. These novel alloys are stronger and more ductile than the titanium alloys used today and are specifically designed to meet the needs of advanced oral reconstructive surgery. The program will allow Dynamet Technology to develop its manufacturing technology and to test prototype dental implants. Participating with Dynamet in this effort is Boston University School of Dental Medicine under the direction of Professor Dan Nathanson, Chair of Dept. of Restorative Sciences and Biomaterials.

NSF Funds Development of Titanium-Tantalum for Biomedical Implant Devices

Under a National Science Foundation (NSF) Phase II SBIR program Dynamet Technology will build on the success of its NSF Phase I grant by continuing to develop innovative titanium-tantalum alloys that are of interest for orthopaedic implants and stents. One of the titanium-tantalum compositions under development has a unique combination of high strength and low modulus. This low modulus alloy will allow the bone to share load with the implant mitigating “bone shielding” that leads to bone deterioration. Dynamet’s titanium-tantalum alloys also have potential as nickel-free stent materials that could eliminate the risk of allergic reactions in nickel hypersensitive patients. The project is also demonstrating that Dynamet’s advanced powder metallurgy can produce novel titanium alloys that are extremely difficult and prohibitively expensive to produce by other means. Participating with Dynamet in this effort is MIT, under the direction of Professor Sam Allen, Dept. of Materials Science and Engineering.

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

TITANIUM 2008 Conference Proceedings

Available on October 1, 2008

Conference Attendees: Free
ITA Members: $125
Non-Members: $245
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**SOLAR ATMOSPHERES MANUFACTURING, INC. NAMES ENGINEERING VICE PRESIDENT**

06/18/08-Souderton, PA- Solar Atmospheres Manufacturing, Inc. names John Barron as vice president of engineering. Barron has over 20 years of experience in the field and oversees the engineering, quality control, and field service efforts of the company. His day-to-day responsibilities include providing customer service and technical support for equipment. His insight is paramount in research projects and the enhancement of current equipment as well as the development of new products.

“John brings a great depth of experience and knowledge to our business. He is well respected throughout our industry. It is an asset to have him on our team,” said Jim Nagy, president, Solar Atmospheres Manufacturing, Inc.

Previously he served as the company’s technical director, and has held various positions in the field. Previously we worked for Ipsen as an electrical/software manager; Vacuum Furnace Systems as electrical engineering manager and technical director; and Lindberg Furnaces as electrical engineering manager.

He holds a Bachelor of Science degree in electrical engineering from Villanova University. He is a member of the NFPA 86 Committee (Standard for Ovens and Furnaces), and is chairperson for the Vacuum Furnace Task Group.

**TLI Group Announces FEM-12SC Now Available**

The TLI Group Ltd. a New Hampshire, USA based manufacturer of an innovative multi Class “A”, “B”, and “D” liquid fire extinguishing agent announces that its product FEM-12 SC is now available to the market. The agent has been approved by the US Federal Aviation Administration (FAA) for use as a Class “D” metal fire extinguisher, and tested and approved by the US Air Force Fire Research Laboratory. The product has passed aquatic testing and is proven to be safe for the environment. FEM-12 SC has been successfully tested extinguishing aluminum, magnesium, titanium, and zirconium fires. This new liquid agent FEM-12 SC brings a new level of safety to the fire protection industry by allowing the agent to be applied from a safe distance of 40 feet, unlike dry powder products which requires their agent to be applied from a distance of no more than eight (8) feet. FEM-12 SC extinguishes metal fires on average in less than four (4) minutes when protocols are applied. When using FEM-12 SC, a person may touch a piece of the previous burning metal with their bare hand immediately after extinguishment of the fire without fear of burning their hand. The new agent can be used indoors and is easily and safely cleaned up after its use. Outdoors it can be used in any type of weather or wind conditions, and unlike dry powders it extinguishes vertical fires.

Traditional dry powder smothering agents when compared to FEM-12 SC on a base line test it was found that the metal beneath the dry powder coating continued to burn and smolder from anywhere from 90 to 120 minutes after the coating was applied. The coating could not be removed after these times do to the fear that the metal would reignite.

FEM-12 SC not only extinguishes the fire more rapidly, cools the metal more quickly, it is lower in price than its dry powder competitors when comparing similar size extinguishing units. For more information and viewing of a video which demonstrates FEM-12 SC on a metal fire visit www.tligroup.com.

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Solar Atmospheres Manufacturing, Inc. designs and manufactures vacuum heat treating and brazing furnaces with a focus on energy efficiency and durability. As a team of specialists with many collective years of experience in the vacuum furnace and hot zone design, Solar is committed to providing vacuum furnaces with the lowest cost of ownership achieved through state-of-the-art materials, high performance operation, and robust design. Visit us on the web at www.solarmfg.com.
Expanding Vacuum Thermal Processing Capabilities

Adding to Solar Atmospheres’ assemblage of high capacity vacuum furnaces, a 36 foot long furnace was installed early 2008 at its Western PA plant. Manufactured by Solar Manufacturing, an affiliate, the 36 foot furnace supplements Solar’s three 24 foot furnaces and the 40 other vacuum furnaces at its two plants in Pennsylvania.

Vacuum thermal processing (VTP) provides a bright or clean finish while minimizing distortion and oxidation. Solar’s state-the-art vacuum furnaces enable precise and uniform temperatures during the heating and cooling of the process cycle. The 36 foot furnace complements these advantages with the capability to VTP lengths up to 36 feet and part loads up to 150,000 lbs. The new furnace has a hot zone with a working diameter up to 6 feet, processing temperatures up to 2650°F, vacuum levels of 10-6 torr, and 2 bar quenching capabilities to cool the large loads.

Solar’s small and large furnaces offer numerous processes and efficient production for the titanium industry. Development runs are done in laboratory furnaces. Numerous mid-sized furnaces, up to six feet long, are used to process loads with numerous parts. Providing economies of scale are the larger furnaces with 10, 12, 24 and the 36 foot long chambers that give the titanium industry unique capabilities and quick turnaround.

The growing use of titanium parts and components by the aerospace industry has greatly benefited from Solar’s large furnace capacity. The furnaces are designed and calibrated to work to any AMS, BAC or LM specification while in a vacuum environment. The vacuum levels (10-6 torr), removes hydrogen and allows titanium to remain bright and alpha case free compared to atmospheric box furnaces. Solar has successfully thermally processed some of the largest and most difficult titanium parts for Boeing’s new 787 Dreamliner and Lockheed Martin’s Joint Strike Fighter. The furnaces’ also are capable of attaining the stringent cooling rates (BASCA / Ti-5553).

Solar’s 20 years of experience in large vacuum furnace technology, with a patented load truck delivery system and on-going technical improvements, have provided the titanium industry more flexibility and better delivery for their products. VTP applications include the following:

- Forgings
- Sheet
- Coil
- Plate
- Weldments
- Bars and long machined parts

Cycles regularly performed include:
- Age harden
- Diffusion Bonding
- Bake out
- Hydride
- Degassing
- Anneal & Solution Anneal
- Stabilize
- Creep Forming
- Sintering
- Solution treat
- Brazing
- Dehydride
- Beta Annealing
- Solution Treat
- Homogenize
- Stress Relieve

As commercial and aerospace specifications become more stringent, more industries are discovering the value of VTP’s controlled environment with precise temperature processing. The large furnaces’ large load capacities also have opened eyes to new production possibilities.

To learn more about the applications of Solar’s vacuum furnaces, call Sales Manager, Mike Johnson, mfj@solaratm.com, 866.982.0660 or Sales Director, Michael Drakeley, mjd@solaratm.com, 800.347.3236.
Oxford Instruments announces the launch of a robust X-ray Fluorescence (XRF) analyzer – the X-MET5000, for highly accurate and reliable elemental analysis. The X-MET5000 represents the 4th generation of Oxford Instruments’ world-renowned X-ray Fluorescence hand-held analyzers.

Engineered for high performance and reliability, this brand new portable XRF analyzer combines Oxford Instruments’ patented PentaFET® detector technology offering guaranteed fast analysis and lower detection limits for all elements of interest. Built for the most demanding quality control applications: scrap metal recycling, analysis of metals for PMI, screening for lead in toys and consumer products for RoHS compliance testing. The X-MET5000 also serves the needs of the mining community for ore exploration, as well as the measurement of heavy metals in soils for environmental monitoring.

The X-MET5000’s major strength is the Light Element Treatment (LET) mode, enabling fast and accurate analysis of heavy elements, even when the sample contains light elements like Aluminum and Silicon. This is not possible when using fundamental parameters (FP) on an analyzer that does not detect the light elements.

This rugged and reliable tool is IP54 (NEMA 3) approved for superior dust and splash protection. The X-MET5000 is perfect for the harshest environments. The battery’s operating time of one working day is unique and enables extended productivity without returning to base.

The powerful user programmable software delivers highly accurate results for reliable Go/No-Go decisions. The X-MET5000 will identify material type and automatically choose the best XRF analysis method.

An optional bench-top stand enables hands-free operation for multi-tasking without the loss in confidence in measurement results.

Oxford Instruments Industrial Analysis

OIIA offers a range of Analytical Instruments designed for demanding quality control applications. From materials analysis to thickness gauging, the Industrial Analysis products incorporate the latest in available technology, coupled with over 30 years of experience in designing, producing and supporting world class instruments.

X-MET handheld X-ray Fluorescence (XRF) analysers and our expanded range of ARC/Spark mobile Optical Emission Spectrometers (OES) are specifically designed for positive material identification, alloy analysis and the determination of hazardous materials for RoHS compliance. Our OES systems comprise: ARC-MET, FOUNDRY-MASTER, PMI-MASTER PRO, PMI-MASTER SORT, TEST MASTER.

Lab-X, Twin-X, ED2000 and MDX1000 XRF spectrometers span the price/performance range for routine chemical analysis. From Sulfur in petroleum products to the analysis of limestone, we can match exactly the correct spectrometer to your needs, as we offer the broadest range in the industry.

For thickness gauging applications we offer handheld magnetic and eddy current gauges to full function, high performance XR systems. Our X-Strata960 and X-Strata980 systems provide world-class performance for coating thickness measurement.

OIIA recently acquired WAS AG (Worldwide Analytical Systems), a leading German manufacturer and international supplier of Arc/Spark optical emission spectrometers and preparatory equipment used to analyse the chemical properties of metals. The acquisition forms part of our strategy to deliver added value and enhanced service to our customers.

Oxford Instruments plc

Oxford Instruments designs, supplies and supports high-technology tools, processes and solutions with a focus on physical science, bioscience, environmental and industrial research and applications. It provides solutions needed to advance fundamental nanoscience research and its transfer into commercial nanotechnology applications. Innovation has been the driving force behind Oxford Instruments’ growth and success for over 40 years, and its strategy is to effect the successful commercialisation of these ideas by bringing them to market in a timely and customer-focused fashion.
Titanium and Titanium Alloy Welding: G-coat for MIG welding

*Increase your productivity and quality in titanium welding*

– and important for aerospace application: with guaranteed no tungsten in the process

With a long history in the industry, Daido continues to create new products and always stays ahead of the pack.

Daido steel, founded in 1916, is a major Japanese steel maker with 3'600 employees and a turnover of over USD 4 Mia. Accounting for about 2 % of consolidated net sales, the New Materials segment supplies mainly titanium products for engine valves, turbine wheels and medical implants, shape-memory alloys, and high-performance metal powders used to make valve sheets and magnetic materials.

The Welding Wire Department is part of the New Materials segment. Daido Steel has developed a specially coated titanium welding wire called G-coat. This is the unique wire which can be used with Gas Metal Arc welding which is more efficient than Gas Tungsten Arc welding. A special oxygen-enriched layer, high tensile strength and a smooth surface give this wire the unique arc stability and wire feedability.

Applications:
For welding of exhaust system for automobiles or motorcycles, shipbuilding, chemical plants, aerospace (guaranteed no tungsten) etc…

Characteristics:
1. High deposition rate by pulsed MIG welding
2. Excellent arc stability in pure inert shilding gas
3. Smooth and uniform surface weld bead
4. Good wire feedability
5. Low spatter
6. Equivalent mechanical properties of welded joint to base metal

G-Coat is available in 5.1 kg spools in 1.0 and 1.2 mm diameter. The range of appropriate current (DCwire+) is 70-150 for the 1.0 mm and 100-300 for the 1.2 mm diameter.

Daido Steel Co., Ltd.
2-30 Daido-cho
Minami-ku, Nagoya
Japan 457-8545
Hiroki HIRAI, Manager Welding Technology
Email: h-hirai@ac.daido.co.jp

for G-coat in Europe:
DKSH Switzerland Ltd.
Advanced Material and Metals Dept.
Wiesenstrasse 8
8034 Zuerich, Switzerland
Tel +41 44 386 7339 Fax +41 44 386 7739
Email: ti@dksh.com

ELG acquires Utica Alloys, Inc.

Effective 1 July 2008, Utica Alloys, Inc., a leading group in the worldwide processing of recycled scrap for mainly superalloys headquartered in Utica, NY (USA), was acquired by ELG Haniel GmbH headquartered in Duisburg, Germany. With this acquisition, ELG unites their existing activities in the superalloys and titanium market segments with Utica Alloys strengthening logistics and processing services to particularly aerospace, power generation and chemical industries worldwide.

Utica Alloys will continue to operate under the direction of its founder, Mr. Joseph Jiampietro, who remains as Managing Director. Mr. Jiampietro, together with Mr.Dimitrij Orlov, ELG’s head of this segment who will take a seat in the Board of Utica Alloys, and the Management Teams of both Utica Alloys and ELG, will continue to provide high quality service to customers while strengthening development and expansion of business worldwide.

Utica Alloys, Inc., established in 1965, is recognized as a leading group in the servicing and processing of recycled scrap materials destined particularly for the vacuum melt superalloys market segment, with facilities in North America, Europe and China.

For further information please contact:
Mr. Norbert Spaeker, CEO of ELG Haniel GmbH, phone +49-203-4501-154 or
Mr. Joe Jiamprietro, CEO of Utica Alloys, Inc., Phone +1-315-733-0475
Thermo Fisher Scientific Demonstrates Alloy Analysis Solutions at TITANIUM 2008, Booth #214

Niton® XL3 800 Series XRF Analyzers Provide Fast, Accurate Performance for Verification of Alloy Composition; XL3t 900 Series Measures Light Element Alloy Content

With the simple pull of a trigger, Thermo Scientific Niton® XL3 800 Series analyzers provide the fastest alloy grade identification and laboratory-quality composition analysis of metal alloys ever performed with a handheld XRF analyzer, significantly increasing sample throughput and user productivity. The XL3t 900 Series, with its unique helium purge measurement head, offers immediate, nondestructive, laboratory-quality chemical analysis of titanium, aluminum, and nickel alloys, as well as superalloys, stainless steel, and other metals.

“The Niton XL3t contains the highest-powered x-ray tube ever offered in a handheld XRF analyzer while providing advanced electronics that enable a host of new features. In fact, the XL3t 900 Series takes the analytical capabilities of handheld XRF to a new level, all but eliminating the need for OES instrumentation in the field for analysis of magnesium, aluminum and silicon,” said Jon Shein, Thermo Fisher’s director of global marketing for the Niton Analyzers business unit. “Increased base metal prices, combined with globalized trade in scrap metal, alloy stock and finished products, have increased the costs of alloy mix-ups to suppliers, distributors and industrial consumers. With our alloy instruments, we are meeting the demand for faster, more accurate results.”

Shein continued, “Most important to us is that customers benefit from instant, positive alloy grade identification and quick, simple report and certificate generation.”

The Niton XL3 800 Series is available in a range of configurations with an assortment of optional features and accessories. It suits a wide variety of analytical needs for applications such as positive material identification (PMI) programs, metal fabrication and manufacturing and scrap recycling. The instruments incorporate 80 MHz real-time digital signal processing and dual state-of-the-art embedded processors for computation, data storage, communication and other functions. The x-ray tube-excited XL3t 800 features a 50 kV, 2-watt miniaturized x-ray tube with multiple multi-layer primary filters to provide optimized excitation for elements ranging from chlorine through the transuranic elements. The XL3t can also be equipped with small-spot sample analysis, allowing users to switch between full area analysis for large samples and a 3mm small-spot to analyze small sample areas. It offers the only fully-integrated and environmentally-sealed VIP™ tilting color touch-screen display for easy viewing of sample results in any position and under all lighting conditions. In addition, all Niton analyzers use third-generation lithium-ion batteries, providing the longest usage cycle of any portable XRF analyzer.

For more information or to schedule an on-site demonstration, contact your local Niton Analyzers representative or contact the Thermo Scientific Niton Analyzers business unit directly at (800) 875-1578 (toll-free US), +1 978 670-7460, by e-mail at niton@thermofisher.com or by visiting our website at http://www.thermo.com/niton.

Thermo Scientific is part of Thermo Fisher Scientific, the world leader in serving science.

X-MET5000 - New hand-held XRF analyzer
Continued from page 12

The first technology business to be spun out from Oxford University over forty years ago, Oxford Instruments is now a global company with over 1,300 staff worldwide and a listing on the London Stock Exchange (OXIG). Its objective is to be the leading provider of new generation tools and systems for the Physical Science and Bioscience sectors.

This involves the combination of core technologies in areas such as low temperature and high magnetic field environments, Nuclear Magnetic Resonance, X-ray electron and optical based metrology, and advanced growth, deposition and etching. Our products, expertise, and ideas address global issues such as energy, environment, terrorism and health and are part of the next generation of telecommunications, energy products, environmental measures, security devices, drug discovery and medical advances. For further information, please contact: Sue Davenport, Email: sue.davenport@oxinst.com
2008 Titanium Achievement Award

Dr. Vladislav V. Tetyukhin Recognized for Outstanding Career Achievements

The International Titanium Association (ITA) has selected Dr. Vladislav V. Tetyukhin as the 2008 Titanium Achievement Award Winner. The Award will be presented on September 22, 2008 during the Annual Luncheon at the TITANIUM 2008 Conference and Exhibition. Dr. Tetyukhin will receive the award for his outstanding career achievements.

After graduating from the Institute of steel and alloys (1956) Dr. Tetyukhin came to the Urals, at Verkhnaya Salda Metal Working Plant. He was one of the key players in the development of the titanium industry in Russia, involved with development of melting technology. In his 50 year career span of working with titanium, Dr. Tetyukhin has lead an exciting career beginning as a casting shop foreman to the Deputy of the company Chief Metallurgist. In 1957 the first titanium ingot was melted with his direct assistance.

In 1976 he was elected a manager of the Scientific and Technical Inspection laboratory of the Scientific and Production Association VIAM, Moscow, in 1980 - a manager of the Scientific and Research Department. When working at VIAM he showed himself as a highly competent specialist in the field of titanium and titanium alloys.

In 1992 he returned to VSMPO and took them from a low capacity facility supporting the Russian titanium industry to one of the primary suppliers for the aerospace industry worldwide, a key supplier for both Boeing and Airbus. Under his direction the plant has updated their melting furnaces to become the largest titanium supplier in the world. He has also instituted skull and hearth melting technology in that facility, as well as bringing in new ancillary equipment to make it a state of the art facility.

After coming to VSMPO, scientific activities of Dr. Tetyukhin were directed only at introduction of Russian titanium into the world market, extension of its application scope. In 1998 production corporation VSMPO-AVISMA (Berezniki Titanium and Magnesium Works, titanium sponge manufacturer) was founded. In 1999 he was elected the Director General of JSC AVISMA. Starting September 1, 2008 Dr. Tetyukhin will serve as President of VSMPO-AVISMA Corporation.

Dr. Tetyukhin has received several awards including:

1960 - the Lenin Award.
1962 - the medal For honorable labor.
1970 - the Order of the Red Banner of Labor
1982 - the USSR Council of Ministers Award.
2000 - the Order of Honor for achievements in favor of the state (the Russian Order).
2001- Honorable badge 300-th Anniversary of the Ural Metallurgy.
2002 - Diploma of the RF Ministry of Industry, Science and Technology, 2002 - the medal named after A.N.Tupolev for the prominent achievements in development of the aviation equipment.

Dr. Tetyukhin made an important contribution in studying and developing the process of vacuum arc remelting with the consumable electrode in the inert gas medium. His scientific activities include authoring over 100 inventions, 10 of which are patented abroad and currently holding over 100 patents.

ITA Accepting 2009 Nominations

The ITA is seeking nominations for the 2009 Titanium Achievement Award Recipient. Members may nominate an individual within the titanium industry who has exhibited outstanding qualities of leadership, and has been responsible for accomplishments that positively impact the titanium community. Complete details as well as the nomination form can be downloaded directly from the ITA website at www.titanium.org.
2008 Titanium Applications Development Award

Susan M. Abkowitz, Dynamet Technology, Incorporated

The International Titanium Association (ITA) has selected Ms. Susan M. Abkowitz as the 2008 Titanium Applications Development Award Winner. The Award will be presented on September 23, 2008 during the Annual Luncheon at the TITANIUM 2008 Conference and Exhibition. Ms. Abkowitz will receive the award for successfully pioneering the development and commercialization of its CermeTi® metal matrix composite material.

Ms. Abkowitz, V.P. Technology & Operations, joined Dynamet Technology, Inc. in Burlington, Massachusetts in 1989, after several years in engineering and management positions at NMI. She earned degrees from the University of Pennsylvania’s Engineering and Wharton Schools under its Management & Technology Program. Ms. Abkowitz directs the research and the manufacturing operations at Dynamet Technology. She has led the development of Dynamet’s manufacturing technology and the commercialization of its CermeTi® composite materials for industrial and medical applications. Along with the engineering and manufacturing staff she is developing titanium applications for lightweight tank components and new biomedical alloys. Ms. Abkowitz, is an ITA member, a Fellow of ASM International and is a past Chairman of the Boston Chapter.

The development of Dynamet’s CermeTi® titanium matrix composite has with its commercialization opened the door to many innovative applications for this highly wear resistant titanium composite. This composite manufacturing technology development and its commercialization is the result of the exceptional technological and marketing efforts of Ms. Abkowitz.

The manufacturing technology represents a technical breakthrough that involves the use of powder metal processes that combine titanium metal and alloy powders with TiC ceramic particulate. The powder consolidation by vacuum sintering and hot isostatic pressing provides a fully densified titanium metal matrix composite offering wear resistance far superior to any commercial titanium alloy. In addition, the alloy composite improves the elevated temperature strength and modulus of elasticity over current titanium alloys.

Unlike improvements of conventional titanium alloys wherein a new alloy may present an incremental enhancement of some properties and might replace an existing titanium alloy, such as Ti-6Al-4V or Ti-10-2-3, this new metal matrix product is opening the door to applications in which titanium would not and could not be previously considered.

The trademarked, patented and patent pending CermeTi®-C material is finding commercial application in industrial components and biomedical devices and is undergoing evaluation for applications in military structural equipment and commercial consumer components.

Ms. Abkowitz, having pioneered these diverse applications in industrial and biomedical applications is also overseeing the development of this material for military hardware. In these applications the wear resistant titanium structures would be replacing steel components permitting the achievement of lightweight goals for advanced military vehicles. Susan has supervised a successful SBIR Phase II Army (TACOM) program targeted at the potential substitution of the Ti composite for track components and other lightweight vehicle structures. Additional CermeTi® applications being pursued range from automotive valves and connecting rods to consumer products such as lightweight hockey skate blades.
The Fundamentals of Titanium Workshop

Coming soon to a location near you.

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2008 New ITA Members

ACNIS International
Acnis International is a major European stockist of Titanium semi-finished products. From a France-based stock and service center, Acnis Int'l offers a full range of grades and forms for industrial, medical, aerospace and chemical industries. Value-added services are also offered.

ADMA Products Inc.
ADMA Products, Inc. is a manufacturer of powder metallurgy products from titanium, zirconium, niobium and other advanced materials and alloys. We specialize in the manufacture of porous and near full density powder metallurgy parts and have extensive expertise in tailoring properties of materials to fit the requirements of our customers. Products are made by die-pressing, cold isostatic pressing direct powder rolling, sintering, coining, re-rolling, high temperature rolling, and other operations. We developed a variety of patented processes for industrial, aircraft, and military applications.

Aeromet International
Aeromet International, one of the largest independent Superplastic and Hot Forming companies produces complex Titanium sheet metal Components and Fabrications for major Airframe and Engine manufacturers on a global basis. Titanium is processed through its 17 Superplastic and Hot Forming presses, chemical milling plant and 5 Axis Laser Cutting facility. Aeromet has 30 years experience in forming Titanium sheet and plate materials, has NADCAP, ISO 9001, ISO 14001 & AS 9100 approvals and provides customers with cost effective design solutions and quality products.

American Titanium Works, Inc.
American Titanium Works LLC is completing plans to build a new, green-field, integrated, world-class titanium manufacturing facility in the southeast of the United States. ATW is targeting the defense, industrial, commercial, consumer and emerging markets with a range of products and services including alloy and commercially pure titanium plate, bloom, billet, slab, and ingot. Applications for our products will include defense ballistics and general military equipment construction, chemical processing equipment, oil & gas systems, pulp & paper production facilities, medical implants, and a wide and growing range of consumer goods.

Ameri-Ti Inc.
Ameri-Ti is a technology based manufacturer of welded Stainless Steel, Titanium and Nickel Alloy Tubing. The Officers, Managers and Production staff are seasoned professionals with decades of welded tube manufacturing experience. We believe that a company must always strive to improve upon its performance. Meeting our customers’ requirements is not enough. We are dedicated to exceeding our customers’ expectations.

Baltic Titan Ltd.
The company “Baltic Titan Ltd” was founded in 2007 as a research and production enterprise with the aim to implement a new method of obtaining metallic titanium. The technical result is directed toward the implementation method of continuously producing metallic titanium or its alloys by omitting the phase of titanium sponge extraction. The Patent “Method and equipment of continuously producing metallic titanium or its alloy” is registered in Latvia with the No. LV13528B, Int. cl. C22B34/00. Presently, the company is setting up its facilities and machinery for production of titanium ingots, diameter 110 mm at the beginning, in cooperation with the Institute of physics of the Latvian State University. We are proud, that experienced and skilled specialists, researchers, and engineers work for the company and share its vision.

Baoji Baoye Titanium-Nickel Industry Co., Ltd.
Baoji Baoye Titanium-Nickel Industry Co., Ltd was established in 1985. As the earliest private enterprise in titanium industry in China, the company has become a key manufacturer of Titanium, Nickel materials and pressure vessels in China now. This company is specialized in the manufacture of titanium and nickel materials, its core business are: Non-ferrous metal materials, clad metal materials and pressure vessels.

Baoji First Titanium Industry Co., Ltd
Baoji First Titanium Industry Co., Ltd. is a private technological enterprise, situated in Baoji which is long known as “China Titanium City.” With an area of 65,800m2 and investment of 130 million RMB, we are professionally engaged in excogitation, manufacturing, processing and selling titanium and Ti alloy. Our company has constructed production lines of smelting and foundry, forging and machine processing with an ability of 12,000 tons. Main products include: titanium ingots, plates, bars, tubes, threads, forgings and Ti equipment. The quality of our products has attained international advanced level and our customers come from the USA, England, France, Germany, Italy, Japan and other advanced countries.
2008 New ITA Members Continued

Beamalloy Technologies, LLC
Beamalloy Technologies, LLC operates a full-service Coating Center specializing in providing ion beam enhanced deposition (IBED) surface treatments on an industrial scale for precision engineered mechanical components. The patented IBED process allows components made from titanium and any of its alloys to be coated directly with a variety of metallic (Cr, Ni, Ag, Au, Cu, Al, Ti) and non-metallic (Cr2N, TiN, Al2O3) materials to enhance wear-, corrosion-, and surface fatigue resistance. Processing temperatures do not exceed 200° F, and there is no need to regrind dimensions or refigure the original surface finish after coating.

Blackfire Exploration Ltd.

Carver Machine Works
Carver Machine Works is a manufacturer and re-manufacturer of equipment and components specializing in Titanium, Hastelloy, Inconel, Stainless, Nickel and various Nickel Alloys. Carver Machine Works holds their “R” and “U” stamps issued by the American Society of Mechanical Engineers (ASME) which allows us to build and repair pressure rated vessels. We are also a National Aerospace and Defense Contractors Accreditation Program (NADCAP) Certified facility in which we currently hold our NADCAP certification in Fusion welding (Titanium and high-nickel alloy). Our skills sets include drafting, engineering, welding, fabricating, dynamic balancing, mechanical assembly, water-jet cutting, and extensive machining capabilities. Industries Served include: Chemical, Mining, Pulp & Paper, Power generation, Aerospace, Municipal, and specialty design. We recently completed a 50,000 square foot expansion which includes sixty foot wide and two hundred foot long bays serviced by 30 ton capacity overhead cranes with twenty four foot under hook. Carver Machine Works is a 100% employee owned company that has been in business for over 30 years.

Chesapeake Ind. Cleaning Products, Inc.
Chesapeake Industrial supplies process cleaning chemicals and degreasers to titanium recyclers and manufacturers. Cleaners for removing oil from turnings, dirt and oil from scrap, cutting fluids from formed products and other typical operations are our expertise. Chesapeake provides a wide range of formulated products from general cleaners to high spec materials made at facilities in several US locations. Drums, Totes and bulk are all available.

Cristal Global
Cristal Global is the world’s second-largest producer of titanium dioxide and a leading producer of titanium chemicals. Cristal Global operates eight manufacturing plants in six countries on five continents and employs more than 3,500 people worldwide. We supply titanium tetrachloride, which is the precursor material for the manufacture of titanium sponge and powder. We have supplied this material to the industry since the early 1980s.

CSIR
The CSIR is one of the leading scientific and technology research, development and implementation organisations in Africa. Constituted by an Act of Parliament in 1945 as a science council, the CSIR undertakes directed and multidisciplinary research, technological innovation as well as industrial and scientific development to improve the quality of life of the country’s people.

Defense Metals Technology Center
The Defense Metals Technology Center “DMTC” is a Center of Excellence formed in June 2007 by virtue of Congressional funding in the 2007 and 2008 Defense Appropriations bills and Ohio Edison funds. Located in the center of the national metals industry, the DMTC functions as an “in the mainstream” operative supporting the mission and goals of the U.S. Army ARDEC Prototype Laboratory at Picatinny Arsenal, NJ. There are eight or so specialty metals that present specific issues for the Army and which the DMTC is tasked to assist in addressing by direct market involvement. The initial metal of concern which the DMTC is currently predominately involved with is Titanium. The US Titanium production and fabrication industry is concentrated in NE Ohio and immediate surrounding areas. The DMTC is setup to be the “Go to” for information and assistance to Academia, Industry and other involved partners as well as being the eyes/ears and local operative for the U.S. Army’s Picatinny Arsenal interest.

Donggang City Orient High-New Metal Material Co Ltd
Donggang City Orient High-New Metal Material Co., Ltd was started in 1996. The enterprise has gotten total assets of 150,000,000 Yuan, total site area 68,000 square meter, building area 17,000 square meters. It has 280 employees, 56 of them are...
2008 New ITA Members Continued

Global Titanium Products, Inc.
The focus of Global Titanium Products is primarily in two areas. The first is a consulting role for titanium and titanium alloy products, processes and applications. The second is to provide manufacturing and conversion capability with value added properties to enhance your applications performance and lower the overall cost. The ultimate goal is to provide enhanced customer service and technical assistance to make it easier and cheaper for new applications to be developed.

Hunan Investment Goldsky Ti Metal Co Ltd
Goldsky is the leading titanium rolled coils maker, who has produced the first titanium hot rolled coil and the first titanium cold rolled coil in China. We are engaged in research all kinds of rolled coils to meet various applications for global market, such as power plant, PHE, desalination, petrochemistry and so on. Our production capacity is 2000 tons this year and would reach 5,000 tons per year in 2010. Welcome business cooperation and representatives.

Intermountain Consumer Prof. Eng
Intermountain Consumer Professional Engineers, Inc. (ICPE) provides “Best in Class” professional design, engineering, procurement, project management and construction management services for scores of clients who have sought its expertise and services on a repeat basis for small discrete assignments to large multi-million dollar, multi-phase design/build projects.

Litespeed Design & Fabrication
Litespeed Titanium has a strong reputation as a very experienced titanium fabricator. Over the past 20 years, Litespeed’s design and fabrication services have produced products utilized for space exploration to winning the Tour de France. In addition to our engineering and process development, Litespeed offers many other capabilities, such as: Press forming, tube drawing, roll forming, custom tool making, cnc machining & welding.

Nanjing Baotai Special Materials Co Ltd
Nanjing Baotai Special Materials Co., Ltd. is an advanced high-tech enterprise that specializes in the research, development and manufacture of titanium products and metal explosive composite materials. Located in Jiangning Development Zone, a national-level development zone in China, our company covers an area of over 18,000 square meters. We have a complete titanium production line, from titanium sponge melting to finished product processing, with annual titanium production capacity of 1,000MT. Our products include pure titanium and titanium alloy plates, sheets for PHE, tubes, bars, welded pipes fittings and etc. We possess ISO9001-2000 quality assurance certificate approved by NQA. Our products are widely used in the petroleum chemical industry, power generation, aerospace, electronics, architecture and sports.

Northern Illinois University
NIU is a comprehensive teaching and research institution with a diverse and international student body of more than 25,000. The College of Engineering and Engineering Technology (CEET) has five departments describe at http://www.niu.edu/CEET/. Active projects in materials and processing includes micro-forming titanium foil, production of titanium fasteners, high velocity impact powder compaction, micro machining, and laser assisted machining. NIU works with Illinois companies on projects to increase their competitiveness and has an engineering intern program. Faculty profiles are found at http://www.niu.edu/CEET/aboutus/faculty_profile.shtml.

P.J. Greco – Kittanning
Purchasers, Processors, Suppliers Of Scrap Metal Recycling, including: Ferrous, Non-Ferrous, Aluminum, Copper, Stainless, Ni-Alloy, Titanium.
Titanium Toll Processing: shearing, plasma cutting, cobbbling.

Pacer Bioscience Inc.
Application of improved or new manufacturing technologies into medical field to enable improved, lower cost, higher quality products, primarily in metals based designs.

Paramount Business Services Inc.
Paramount Business Services Inc. is a company committed to building and maintaining strong business and partner relationships. We represent large Chinese Titanium Sponge companies that manufacture sponge. In addition, we also supply Vanadium products such as FeV80, FeV50 and V205. These products are supplied worldwide, throughout USA, England, Germany, France, Japan and Canada.

Precision Titanium Components Inc (PTC)
Process tooling supply and processing of components for largest com-
2008 New ITA Members Continued

Commercial Brine Tank project. Liner development for thin gage titanium sheets (0.020 to 0.063 gage) using Laser welding. Precision Machining both linear and cylindrical. Product and Processing Development for Titanium applications (and combination materials), Laser welding of thin gage materials, Precision machining both cylindrical and linear, Application areas primarily connected to: chemical systems, water treatment, metal reclaiming, medical rehabilitation equipment.

Recycling Coordinators, Inc.

Roll Forming Corporation
RFC has an aerospace division that forms and welds titanium structures.

Ryerson-MicroJet
Ryerson – Microjet, a division of Ryerson, Inc., has specialized in waterjet cutting since 1995. As a leader in the waterjet industry for nearly 13 years, we can process virtually all materials including hard-to-cut metals such as titanium. Whether the application requires roughing out a 6" titanium plate or cutting a precision flat-pattern part in thinner titanium, Ryerson-Microjet has the expertise to handle your titanium processing needs. Our markets include aerospace, electronic, medical, machinery, recreational and signage. Cutting areas up to 72" x 144". Materials cut to 10" thick and tolerances held to +/- 0.003" on thinner materials. Ryerson Inc. ranks as the nation’s number 1 distributor of metals. Our 100 plus service centers throughout the United States stock a wide variety of aluminum, stainless and carbon steel, as well as copper and brass. In addition, Ryerson offers a broad array of value-added services for every product line. Our capabilities in addition to waterjet cutting include flame, plasma and laser cutting, blanking, slitting, cutting to length, sawing, forming, punching and rolling. Ryerson-Microjet has the ability to supply most metals in sheet, plate, bar or tube form.

Solar Manufacturing Inc.

With an eye on advancing hot zone design and furnace controls, improving energy efficiency and quench performance, Solar Manufacturing has built some of the world’s largest horizontal vacuum furnaces. Our Model HCB-84 vacuum car bottom furnace is a unique furnace designed to process large work loads of up to 150,000 pounds. The HCB-84’s graphite insulated hot zone features operating temperatures to 2800°F with a uniformity of ±10°F throughout its work zone. The work zone measures 54" wide x 54" high with lengths of 12 feet, 24 feet and 36 feet. It’s a winning combination of an impressive weight capacity, energy efficient hot zone and high velocity gas quenching! Solar also supports their customers with a wide choice of aftermarket services including spare parts, hot zone rebuilding, furnace refurbishing, and leak detecting and maintenance contracts.

TiFast s.r.l.
TiFast is an integrated European company supplying industrial and medical manufacturers over the world. With full production facilities, incorporating the melting shop, rolling mill shop, finishing and machine shop as well as laboratory and R&D facilities, the company is specialized in the production of ingots, slabs and bars of titanium and its alloys. ISO9001 approved.

Titanium International Group SRL
We are a stockist and distributor of titanium and titanium alloys, special steels and nickel alloys for the aerospace, defense, automotive, racing, packaging, medical and mechanical markets. We supply sheets, plates, round bars and rectangular bars. We also supply cutted pieces with saw cut or water-jet cut according to customer’s drawings. In addition, we can do mechanical works and impression die forging with companies of our group. We are distributor of ThyssenKrupp Titanium GmbH (Germany) for aerospace market in Italy.

TLI Group Ltd.
The TLI Group Ltd. is a manufacturer of innovative fire protection products and solutions. These materials can be tailored to protect a wide range of flammable material including cardboard, wood, natural fibers and metals. TLI has a goal of taking a leadership role in the fire protection products to markets worldwide. Headed by a synergistic research and development team of seasoned professionals, TLI continues to search for new application of its base mixture of organic materials. TLI has completed the development of a new liquid fire extinguishing agent "FEM-12 SC" for class "D"
2008 New ITA Members Continued

(Metal) fires such as Aluminum, Magnesium, Titanium, and Zirconium. This liquid agent was recently approved for use as a class “D” agent by the United State Federal Aviation Administration (FAA) for use at all United States Airports. FEM-12 SC has passed testing for fire suppression and aquatic toxicity testing. Testing was performed by the US Air Force Fire Research Laboratory. The organic product is bio-degradable and environmentally safe. TLI is committed to developing products that are environmentally safe as well as cost effective and extremely reliable.

TZ Minerals International Pty Ltd (TZMI)
TZ MINERALS INTERNATIONAL PTY LTD (TZMI) is an independent consulting and publishing company, established in 1994. TZMI’s team of principals and specialist consultants have been closely involved in the mineral sands and TiO2 pigment industries since the 1970’s, accumulating well over 100 years of experience. TZMI specialises in confidential consulting services for the titanium minerals, zircon, titanium sponge and TiO2 pigment industries as well as publishing specialised market studies and reports based on its comprehensive database of production and market data. TZMI employs full-time professional research staff who collect and analyse data which includes up to date supply/demand models, technical data and operating cost data for all major titanium feedstock and pigment producers.

Weber Metals Inc.
Weber Metals, Inc. history dates back to 1945, when Mr. Edmond L. Weber founded an open die forging business in Paramount, California at the site where the company operates today. Weber Metals continued to grow throughout the 90’s as a major supplier in aluminum and titanium forgings to the Aerospace Industry. The facility has grown to 283,773 sf. Through specialized product line growth, alliances with other forging companies, and growth in market share in aerospace structural parts, annual sales topped $100,000,000 by 1998. Today, even with significant declines in the Aerospace Market following 9/11, our sales have grown to approximately $135,000,000 and we employ more than 300 people. Our company continues to invest heavily in education training of personnel, upgrades in equipment, modernization of facilities, new forging capabilities, and applied research in materials and forging technologies to provide forgings of the future, today.

Drawback Program
Do You… Import goods and later export them? Export manufactured goods which contain imported parts? Receive another’s imported goods and later export them? Import goods and sell them to others who later export them?

Then… You may qualify for a Duty Drawback Program
To confirm eligibility, simply give us a call.
Our drawback department can assess your company’s existing processes and also make recommendations for your consideration.

Contact:
Hank Ramsdell, Drawback Manager
781-245-0601
781-245-0569 fax
HERAMSDELL@CHPOWELL.COM

99% REFUND APPROVED
Classified Ads

Job Posting:

Titanium Engineer
Fort Wayne Metals Research Products Corporation is seeking a Titanium Engineer. The ideal candidate should have a Bachelor’s degree in Metallurgical or Materials Science or other related degree. They should also have a minimum of five (5) years experience in Titanium processing, knowledge of metallographic analysis, scanning electron microscopy (SEM) operation and general metallurgical testing and analytical procedures.

Responsibilities include serving as the Titanium subject matter expert for Fort Wayne Metals, and our customers, and monitor and refine processes in order to produce high quality Titanium products that meet cost and efficiency requirements. Contact Melissa Twitchell at 260-747-4154, ext. 213

QCML Lab Director
Exciting applied research opportunity. The Quad Cities Manufacturing Laboratory (QCML) director will work with government and industry partnership to commercialize advanced titanium based manufacturing processes. The director is technical lead for QCML projects and their financial performance. Administers QCML governance. For more information or to submit a resume contact Dr. Johnson at mjohnson@niu.edu.

QCML Technical Staff
The Quad Cities Manufacturing Laboratory (QCML) is now taking applications for the following positions:
- Welding Engineer (with titanium emphasis)
- Titanium Processing
- Investment Casting
- Solidification & Process Modeling.
For more information or to submit a resume contact Dr. Johnson at mjohnson@niu.edu

Staffing QCML Lab
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Beamalloy Technologies, LLC provides coating services for precision components made from all titanium alloys using the patented ion beam enhanced deposition (IBED) technology. A variety of metallic (Cr, Ni, Ag, Au, Cu, Al, Ti) and non-metallic (Cr2N, TiN, Al2O3) coatings designed to enhance wear-, corrosion-, and fatigue resistance can be applied. Processing temperatures do not exceed 200° F, and there is no need to regrind dimensions or refigure the original surface finish after coating.

Materials needed:

TECT Power is a privately held custom manufacturing service supplier of semi-finished and finished components and assemblies. Our products include: solid and hollow fan blades, compressor blades and vanes; BLISKS; IBRs; impellers; diffusers; turbine airfoils; rotor shafts and hubs; disks; oversized and precision forgings; and other hardware. TECT Power will be the preferred supplier of precision components and assemblies by offering integrated solutions for aerospace and other markets served.

Looking for Excess Usable Inventory

North American Alloys is looking to buy excess usable inventory, remnants, scrap or recycle in all titanium alloys. Call us today for a prompt and competitive bid.

Contact: Michael Shulimson
Telephone: 818-890-2250 or 800-985-2250
Fax: 818-890-7102
Email: m.shulimson@att.net

Steven Meredith
Telephone: 509-586-8848 or 800-985-2250
Fax: 509-586-4943
Email: steve@northamericanalloys.com

Visit us on the web at: www.northamericanalloys.com
North American Alloys
10849 Ralston Ave
Pacoima, CA 91331 USA

Materials for Sale:

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, petrochemical industry, aviation industry and sports appliances.

Our manufacturing capability as follows:
1. Titanium and its alloy tubes & Pipes ASME SB/ASTM B 861, 337, 338, Diameter: 6-159mm Thickness: 0.5-15mm Length:
Maximum 16 meters.
2. Titanium and its alloy rods ASTM B 348, F 67 Diameter: 10-150mm
3. Titanium and its alloy sheets & plates ASTM B 265, F 67 Thickness: 0.7-50mm Width: <2500mm Length: <6000mm.
4. Titanium and its alloy wire according to ASTM B 863 Diameter: 0.4mm-10mm
David Dai
Jiangsu Hongbao Group Co. Ltd.
Phone: 86-512-58715259 Fax: 86-512-58715267
Email:foreigntrade@hongbao.com

We offer the following material:
Ti6Al4V AMS4911 AMST9046 and WL 3.7164 LN9297 - Cond. Annealed
Mill: Thyssenkrupp Titanium GmbH
mm 10 x 1219 x 3500 - approx kgs 226,00
mm 10 x 1219 x 3660 - approx kgs 3.528,20
mm 10 x 1220 x 3500 - approx kgs 233,20
mm 10 x 1220 x 3660 - approx kgs 699

Thank you very much.
TIG Srl
Sales Departement, Silvia Pulga
Dir: +39.051.37.640.57
http://www.titanium.it/
Via Europa, 13 - 15
Sala Bolognese (BO)
Tel. +39.051.68.148.93 / +39.051.37.64.011
Fax +39.051.68.148.94 / +39.051.37.64.039
Email: tig@titanium.it

GfE Metalle und Materialien GmbH
GfE is a leading manufacturer and global supplier of high performance metals and materials. With almost one hundred years experience in the field of materials science, the company employs this invaluable expertise in the development of tailor made materials, customized applications and solutions for our customers. GfE offers a wide range of high quality products for different specialized sectors such as: Aerospace industry, Superalloy industry, Automotive industry, Power plants, Chemical plants, Off-shore technology and other applications

Equipment for Sale:
3 ALD VACUUM ARC TITANIUM MELT FURNACES
To be sold individually or as a group: Three 120lb capacity vacuum arc titanium casting furnaces. These model L50 SM furnaces can be modified to pour up to 150lbs. They are well-maintained and were originally purchased from ALD Vacuum Technologies between 1989-1995. For more information, please contact Dave Robins at daver@seacast.com or phone 206-276-5621.
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<td>Affinity International LLC</td>
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<td>Hyundai Titanium Company, Ltd.</td>
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<td>Pacific Cast Technologies, Inc.</td>
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<td>Paramount Business Services Inc.</td>
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Founded in 1984 the International Titanium Association is a nonprofit networking trade association for the titanium industry. Current membership includes 195 organizations.
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