



TIMS 2013
142nd Annual Meeting & Exhibition

27th EXHIBITION

**March 3-7, 2013 • Henry B. Gonzalez Convention Center
San Antonio, Texas, USA**

Exhibit Hours

Monday, March 412 p.m. - 6:30 p.m.
Tuesday, March 510:30 a.m. - 6:00 p.m.
Wednesday, March 6.....10:30 a.m. - 3:00 p.m.

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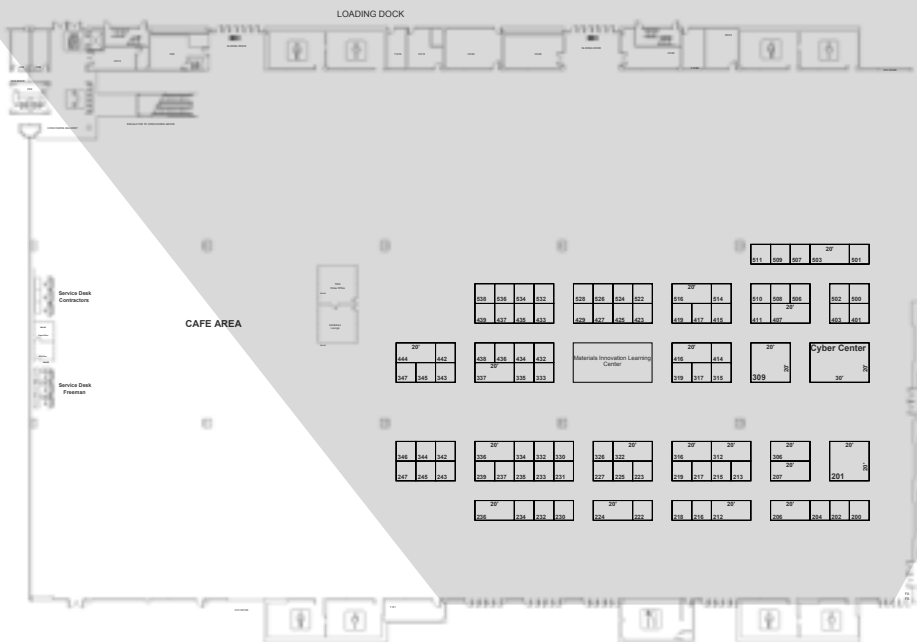
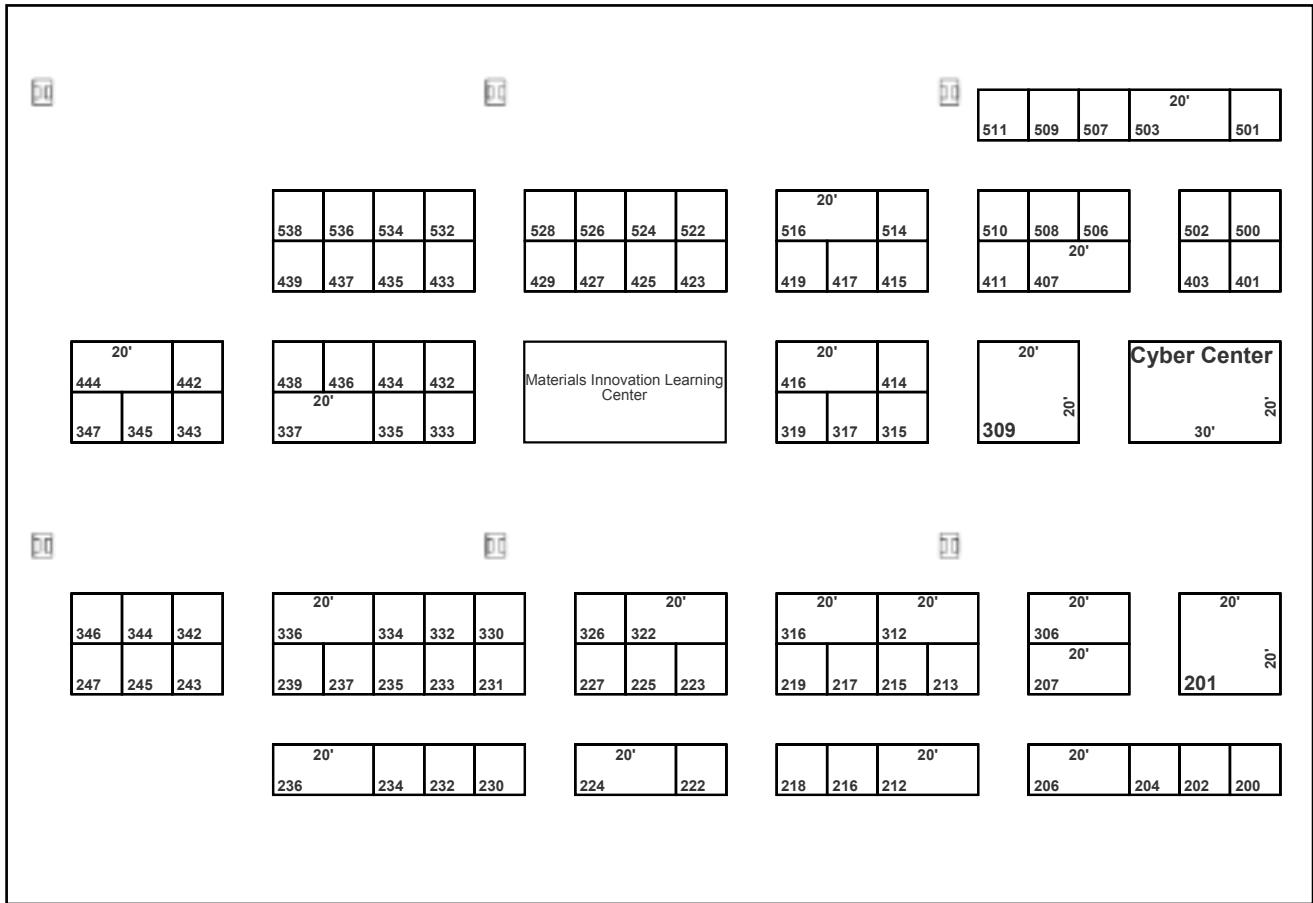


Exhibiting Companies

(as of January 22, 2013)

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Floor Plan of Henry B. Gonzalez Convention Center





Company Descriptions

ABB Inc.

Booth #401

ABB Inc. Analytical Measurements - Measurement Products Group designs, manufactures and markets high-performance analytical system solutions and spectroradiometers for petroleum, chemical, life sciences, academic, semiconductor, metallurgy and remote sensing/aerospace markets. Building on more than 40 years of experience in analytical instrumentation, ABB has established itself as a worldwide leader in inclusion and hydrogen measurements in liquid aluminum. The company offers a complete range of analytical solutions to the aluminum industry: AISCAN™ hydrogen analyzer, LiMCA inclusion analyzer, Prefil@-Footprinter melt cleanliness analyzer, PoDFA inclusion identification and quantification analysis. ABB also offers metallographic analysis service for its customers.

Across International

Booth #500

Founded and based in New Jersey, United States, Across International supplies crystal substrates, laboratory equipment, in the area of heat treatment and material processing for universities, research facilities and labs. We have more than 15 years of industrial manufacturing experience in drying ovens, ball mills, lab furnaces, pellet presses and pressing dies.

Our goal is to build up business partnerships with friends around the world. We provide quantity discounts and will reply to your requests within the same business day; 100% customer satisfaction is always our first priority.

AdValue Technology, LLC

Booth #245

A leading supplier of high temperature ceramic products made of Alumina, Fused Quartz, and Zirconia. Our products range from crucibles, furnace tubes, plates and discs, thermocouple insulators, sample pan for thermal analysis, to custom components. Large selection of in-stock items available for fast delivery. Custom production can be arranged according to drawings.

Advanced Dynamics Corp., Ltd.

Booth #200

For over four decades, Advanced Dynamics (ADCL) has supplied our global customer base with state-of-the-art material handling systems for carbon plants and cast houses. Our handling technology includes fully automated or semi-automated equipment for anode handling and cleaning, aluminum ingot and T-Bar handling, sawing and packaging systems. We also have experience in specialty systems for the magnesium, copper, zinc, steel and lead industries.

ADCL is a one-stop shop for your material handling needs including mechanical and controls engineering, fabrication, assembly, test and commissioning. Whether you need a new system or upgrades to existing systems or simply

individual pieces of equipment, we can help improve your company's productivity. Remember, "Our ingenuity delivers productivity" when you think of ADCL for your next project. Please look at our new website www.advanceddynamics.com for the latest news and information.

Aluminium International Today

Booth #536

Aluminium International Today is the Aluminium Industry's leading international publication reporting on aluminium production and processing worldwide. Founded in 1989, the journal has consistently provided a wealth of technical features aimed at equipping producers and processors with information on latest developments. Added to this is a regular digest of industry news, contracts, events, new technology, product reviews and conference reports. Supported by the Aluminium Federation in the UK, Aluminium International Today publishes six times a year in English plus two Chinese issues and two Russian issues. Aluminium International Today is a subscription magazine. For a sample copy visit www.aluminiumtoday.com/sample-issue. Contact: Aluminium International Today Quartz Business Media, Quartz House, 20 Clarendon Road, Redhill, Surrey RH1 1QX, UK. Tel +44 (0)1737 855000 Fax +44 (0)1737 855034 e-mail aluminium@quartzltd.com web www.aluminiumtoday.com

Aluminium Times

Booth #510

Aluminium Times is published five times a year and a sixth edition in Chinese is available from our booth at Aluminium China Exhibition. The journals mails out 5,200 copies every issue to primary and secondary aluminium producers, rolling mills, extruders and other fabricators. Accompanying the magazine are industry maps and directories covering primary, secondary, rolling mills and extruders.

AluminiumNetwork.com

Booth #217

AluminiumNetwork.com The global network for the primary aluminium industry An internet-based portal offering a wide range of daily information and services to companies and individuals engaged in the primary aluminium industry Our services include all engineering disciplines from the alumina through to the primary aluminium, including all the support functions for the processes involved. An important feature of aluminiumnetwork.com is its database of consultants and freelance specialists with experience in the aluminium industry. In addition to providing general consultancy services, the experts can offer their support in a large number of areas including feasibility studies, recommendations for revamps, overhauls and repairs, spare parts, purchasing, technical evaluation, research, advice on compositions and formulations, global supplier evaluation and auditing, process evaluation and optimisation, The support can be on a freelance basis and for as long as it is needed.

Company Descriptions

ArcelorMittal Commercial RPS

Booth #508

ArcelorMittal is the world's leading steel and mining company. Guided by a philosophy to produce safe, sustainable steel, it is the leading supplier of quality steel products in all major markets including automotive, construction, household appliances, and packaging. ArcelorMittal operates in 60 countries and employs about 260,000 people worldwide

ArcelorMittal Rodange – Hot Rolling Mill located just outside Luxembourg City - is the single largest producing site of Cathode-Collector bars in the world. The company introduced the Low Resistivity, LR Grade Steel for the Pot application in 2001, and then the Ultra Low Resistivity Steel, ULR Grade, in 2010. ArcelorMittal is major suppliers to all the main Aluminium producing Groups, and many Independent Aluminium Smelters.

ArcelorMittal Rodange provides machining and finishing of Cathode-Collector Bars. First Copper Cored Collector Bar (CCCB) was manufactured in 2004, and the company is supplying increasing quantities of this type of Cathode-Collector Bar, as the advantages of CCCBs become increasingly clear.

The ULR Grade steel is also appropriate for use in Anode Assemblies – as both Spiders and Stubs - displaying significantly lower Resistance/Resistivity than Cast Steel Spiders, and as compared to the commercial steel grades usually used for Stubs.

We would be happy to discuss and cost your designs for these items, and look forward to meeting you at our Booth.

ATR

Booth #342

The ATR National Scientific User Facility offers materials science engineers and scientists the opportunity to test materials in an irradiation environment and perform analyses on the irradiated specimens. Capabilities available include three test reactors and a host of post irradiation examination facilities across the United States. Non-proprietary research is cost-free to U.S. university led teams.

Access to facilities is through a solicitation and review process: The kinds of research solicited include, but are not limited to, advanced materials for high performance reactor systems, understanding light water reactor core materials including austenitic steels and nickel alloys, determining properties of material joints after exposure to a neutron irradiation environment and the applicability of nanostructured materials to radiation resistant applications. To learn more about ATR NSUF, please visit our website at: <http://atrnsof.inl.gov>.

AUMUND Foerdertechnik GmbH

Booth #202

With their proven track record in materials handling and storage from mineral processing to hot materials handling the AUMUND Group offers engineered and cost effective solutions for the primary aluminium production process. Controlled cooling and clean handling of bath material in the primary aluminium smelting process with the AUMUND Cooling conveyor for hot bath material: • Economical and efficient handling • Defined cooling from 850°C down to below 100°C • Drastic reduction of HF emission through controlled suction • Improved environmental and health conditions • Reduced investment and operating cost
See us at TMS 2013, booth no. 202

Boise State University Materials Science & Engineering

Booth #442

Interested in a Ph.D. in Materials Science and Engineering? Apply Now! Boise State University is home to one of the most productive Materials Science and Engineering programs in the Pacific Northwest. We offer rewarding graduate programs that facilitate interdisciplinary research with physics, chemistry, biology, mechanical and biomedical engineering, and electrical engineering. <http://coen.boisestate.edu/mse/>

Boreal Laser

Booth #347

Boreal Laser of Canada is the leading supplier of Hydrogen Fluoride (HF) monitors for environmental and process control in primary Aluminum smelters worldwide. The GasFinder2 and GasFinderFC portable systems are used for HF emissions reduction studies and pot line roof monitoring. GasFinderMC is a fixed, multi-channel system that monitors multiple pot room roof paths for improved environmental performance. GasFinderMC is also used in HF scrubber systems (GTC, FTC) for multiple duct and stack monitoring in order to optimize scrubber performance. Primary benefits of the GasFinder technology are self-calibration, robustness, ease-of-use and industry-leading technical support. Today more than 200 GasFinder systems continuously monitor over 1000 HF measurement points in 60 smelters in 25 countries worldwide. Primary benefits of the GasFinder technology are self-calibration, robustness, ease-of-use and industry-leading technical support.



Company Descriptions

Bosch Rexroth Corp

Booth #516

Bosch Rexroth manufactures specialized pneumatic systems to improve process efficiency in the smelting pot room. Our pneumatic cylinders and valves are designed to withstand the harsh temperature and environment encountered while being installed on the pot and used to break the cryolite crust or the feeders.

Brochot

Booth #439

BROCHOT Group, for the Non-ferrous metal industry (primary aluminum, copper, zinc, magnesium, nickel and cobalt), is a world leader in the design, manufacturing, and on-site installation of:

- Special Machinery
- Automated handling key equipment

BROCHOT is able to deliver projects on a turn-key basis, for equipment or a complete workshop.

The company offers the benefit of its know-how, acquired since its creation in 1825 and the accumulation of its international experience.

BROCHOT provides its customers a close relationship for hands on after-sales services. BROCHOT has manufacturing facilities and a multicultural team all over the world (France, China, Canada ...). BROCHOT's equipment is designed with full regard to the client's individual specifications, local conditions and ergonomic requirements. BROCHOT's mission is to create long-term partnerships with its customers, delivering innovative and optimal solutions, in order to maintain its technological advance.

Buss ChemTech AG

Booth #330

Buss ChemTech AG (BCT) offers fully dedicated applications for Green Anode Production based on 60 years of experience.

Covering:

- modular and fully continuous running Green Anode Plants e.g. KAS Carbon Plant
- Equipment and engineering for dry material handling, horizontal paste production up to the formed green anode
- Pitch storage and melting Plants based on an exclusive and very unique technology
- Original BCT Paste Kneader known as the most advanced kneading application

Our highly skilled and experienced engineers are available to provide you the highest level of support to execute inspections, process studies, training and all kind of technical support.

BCT is a member of KRESTA since September 2011. KRESTA Industries is an industrial group with its own fabrication facilities associated with full EPC project capabilities. This

strategic alliance is a further step to continuously ensure the best available technology and solution for our customers.

CA Picard International

Booth #219

C.A. Picard Engineering GmbH & Co. KG Production, Service and Sales of Wear and Spare Parts Components for Anode Paste Mixers for the Aluminum Industry. C.A. Picard Engineering GmbH & Co. KG is manufacturer of high class equipment and spare parts for various industries with wear intensive products and therefore the leading expert for various surface protection methods and wear protection materials. We are certified according to DIN ISO 9001 and our internal processes guarantee that we supply stable high quality according international norms and regulations. The high requirements for special wear protected surfaces for the production of anode paste were the driving force of C.A. Picard to further develop existing wear protection materials and application methods to extend life time and reduce production costs. We offer optimized wear and spare parts at economical prices. Send us your enquiry! We offer alternatives, no compromises! Visit us in San Antonio, Texas at TMS, booth No. 219

CIMM

Booth #526

CIMM Group Ltd. is China's leading supplier of Materials for Primary Aluminium Smelters and Alumina Refineries worldwide. Aluminium Fluoride Insulation Refractory Bricks Carbon products for aluminium smelters "Our goal is very simple. To provide the best integration of production, quality and price. We not only provide stand-alone products to our customers. More than anything, we are focusing on the delivery of an entire "customized sales and production system" supported by our experienced sales and technical experts from the receipt of our customer's orders, throughout our entire production process to the final product for the corresponding alumina refinery, aluminum smelter or producer. Our "customized sales and production system" makes our CIMM personnel proud and is valued by our important customers worldwide."

Claudius Peters

Booth #334

In the field of materials handling and processing, from stockyard, pneumatic conveying, silo, clinker cooler, grinding mill and packing & dispatch systems, Claudius Peters are experts in the Cement, Coal, Alumina, Gypsum and Bulk Handling industries.

Claudius Peters Projects GmbH, Germany and Claudius Peters Technologies SAS France are part of the Technologies Division of Claudius Peters Group GmbH, headquartered in Buxtehude, near Hamburg, with regional offices in the Americas, Europe, China and the Far East, offering turnkey and semi-turnkey systems.

Company Descriptions

The group's other principal division, Aerospace, is engaged in the manufacture of aircraft parts for the European Airbus programme. Claudius Peters Group GmbH is a wholly owned subsidiary of Langley Holdings plc, a privately controlled UK engineering group.

CompuTherm LLC

Booth #218

CompuTherm LLC, a spin-off company from University of Wisconsin-Madison in 1996, has been developing computational tools for industrial applications in the broad field of materials science and engineering. After 16 years of dedicated work on computational thermodynamics and kinetics, CompuTherm's PandatTM software and databases are currently used by hundreds of researchers from universities, research institutes, and industrial companies worldwide. To keep pace with the new technology, CompuTherm continuously improves the PandatTM software using the latest technology of computer science. CompuTherm is pleased to announce the new release of PandatTM2012 software, which includes many new features and upgrades. PandatTM2012 is designed to create an integrated workspace for variety of calculations, including the calculation of multi-component phase equilibria and thermodynamic properties, the simulation of diffusion-controlled precipitation kinetics during heat

treatment processes, and the optimization of various types of model parameters. In addition, PanEngine API provides a dynamic linked library which can be linked with the user's in-house code to create customized applications. CompuTherm has also developed multi-component thermodynamic databases for variety of alloys, such as Al-, Co-, Fe-, Mg-, Mo-, Nb-, Ni-, and Ti-based alloys. Mobility databases for some alloy systems are also available with the 2012 new release.

CSM Instruments

Booth #345

CSM Instruments offers a wide range of instruments and testing services for surface mechanical properties characterization, including: Hardness Testers, Scratch Testers and Tribometers. 3D-imaging options are available with the ConScan or AFM objective. CSM manufactures standalone instruments as well as testing modules that can be combined together on an automated platform. CSM Instruments is proud to announce the launch of its new Nano Tribometer (NTR2) and Nanoindentation Tester (NHT2).

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Company Descriptions

Cytec Industries, Inc.

Booth #416

As the premier advanced chemicals partner for the Alumina industry, Cytec specializes in producing products with the breadth and depth to advance all stages in the Bayer Process. Our MAX HT® scale inhibitor, a revolutionary product that eliminates sodalite scale from heat exchanges, recently received the Environmental Protection Agency's Presidential Green Chemistry award. Combined with Cytec's unmatched R&D capabilities and world-class application expertise, we continue Delivering Technology Beyond our Customers' Imagination™ and encourage and enable the right level of performance.

To learn more about how the premier supplier of mining specialty chemicals breaks down the barriers of what is possible today and unlocks the new possibilities for tomorrow, visit <http://www.cytec.com/specialty-chemicals/alumina-processing.htm>

Dubai Aluminium ("DUBAL")/EMAL **Booth #206**

A state-owned corporation, DUBAL operates the world's largest single-site primary aluminium smelter using pre-bake anode technology (over one million mtpa). DUBAL's Jebel Ali complex includes a 2,350 MW power station, a large carbon plant, casthouse operations, a water desalination plant, and other facilities. High quality aluminum products are made in three main forms: foundry alloy for automotive applications; billets for construction, industrial, transportation and automotive forging; and high purity aluminium for electronics and aerospace. DUBAL's proprietary reduction technologies rank among the best available.

EBSA Analytical **Booth #433**

EBSA Analytical provides advanced microstructural materials characterization services using EBSD/EDS/SEM techniques. We specialize in providing texture, grain size, ODF, grain boundary analysis, and phase ID including elemental composition. With over 16 years experience in EBSD, you can trust that the results we provide will be of the highest quality.

EDAX Inc. **Booth #423**

EDAX is a leading provider of innovative materials characterization systems encompassing Energy Dispersive Spectrometry (EDS), Wavelength Dispersive Spectrometry (WDS), Electron Backscatter Diffraction (EBSD) and Micro X-ray Fluorescence (XRF).

EDAX products include standalone tools for EDS, EBSD and WDS, integrated tools for EDS/EBSD, EDS/WDS, and EDS/EBSD/WDS, and a free-standing micro-XRF bench-top elemental analyzer providing small and micro-spot x-ray analysis and mapping.

EDAX develops the best solutions for micro- and nano-characterization, where elemental and/or structural information is required, making analysis easier and more accurate.

EDAX designs, manufactures, distributes and services products for a broad range of industries, educational institutions and research organizations

EGYPTANODE **Booth #216**

EgyptAnode is a merchant coke calcining and baked carbon anode production facility, aiming to produce high quality carbon materials to be used in the aluminium industry worldwide. EgyptAnode is set to build its own calciners as a 1st phase of its project, with a 300,000 MT capacity of high quality calcined coke (Anode & Fuel grade) with start-up scheduled in 4th Quarter 2013, while the anode production is scheduled to be in 2015. The facility is located in Suez, Egypt, on the Southern entrance of the Suez Canal, on the Red Sea, at a short distance from Egypt's Mediterranean ports, giving it an ideal location to the Middle Eastern, European, and the American markets.

Energoprom Group **Booth #511**

Energoprom group is one of the most efficient companies of non-raw material sector of the Russian economy, runs business globally and supplies more than 50% of its production to the world market.

Eirich Machines, Inc. **Booth #319**

Eirich Machines designs, manufactures & supplies batch & continuous mixers & systems for the processing of raw materials, compounds, waste & residues in a wide range of industries. Our complete line of products for mixing, agglomerating, pelletizing, grinding, granulating & plasticizing range from 1 to 10,000 liters can also be equipped with vacuum. The results of this process technology are synonymous worldwide for some outstanding achievements in the solution of problems in diverse applications. A full line of test equipment allows for pre-sale testing in our lab or the customer's own plant.

Electrometals Technologies Limited **Booth #528**

Electrometals is a world leader in metals recovery based on the unique and patented EMEW technology and ancillary technologies. We have successfully commercialized this unique electrowinning technology to recover high purity metals from low concentration, polymetallic and contaminated solutions. Electrometals has commercial installations worldwide including the USA, Mexico, Chile, the UK and India.

Company Descriptions

Fives Solios

Booth #306

Fives Solios designs and supplies process equipment and turnkey plants for: • Coal Tar Distillation • Reduction: Gas Treatment Centers on electrolysis pots and Bath Processing Plants. • Carbon: High Capacity Green Anode Plants, Pitch storage and processing, Liquid Pitch Terminal, Firing & Control Systems as well as Fume Treatment Centers for anode baking furnaces • Casthouse: Melting and Holding furnaces including water cooling systems, Heat Treatment furnaces and Genios, the latest technology of metal moving system to stir, transfer and cast.

FLSmidth

Booth #212

FLSmidth is your major equipment supplier from Bauxite Mining and Refining through Calcination to Smelting. Every day, worldwide, our equipment crushes, conveys, grinds, digests, clarifies, precipitates, stores, and calcines hydrate to produce alumina. Few other technology suppliers can offer such a broad range of equipment and processes while increasing recoveries, lowering energy consumption, and providing proven reliability with environmental protection. FLSmidth combined the industry's leading brands and expertise providing integrated solutions that will save valuable time on your project schedule!

Gautschi Engineering GmbH

Booth #333

Gautschi Engineering GmbH is a leading supplier of equipment for primary aluminum casthouses and recycling plants.

The product range of Gautschi™ includes:

- Melting – and holding furnaces
- Pusher-type furnaces for rolling slab
- Homogenizing furnaces for extrusion billet and rolling slab
- Multiple chamber furnaces for coil and foil annealing
- Single coil annealing furnaces
- Horizontal D.C. casting plants
- Open mould ingot casting and stacking plants
- Vertical D.C. Casters for extrusion billet and rolling slab
- AIR GLIDE® and AIRSOL VEIL® mould technology

Gillespie + Powers, Inc.

Booth #444

As we celebrate our 75th year in 2013, we would like to thank our customers for their loyalty and our vendors for their continued support.

Gillespie & Powers is engaged in the design, supply, installation, and maintenance of industrial aluminum melting and process furnaces, refractory systems, acid-proof construction, and specialty refractories, waste incineration, boilers, multi-hearth furnaces, delacquering equipment, fume incinerators, as well as modifications to existing equipment. We also provide engineering and thermal imaging services.

GLAMA Maschinenbau GmbH

Booth #322

GLAMA has designed and built heavy-duty Equipment for Aluminium pot rooms, cast houses and anode rodding shops throughout the world for more than 50 years. The following type of equipment is available: - Anode Changing Vehicles - Anode Pallet Transporters - Butt Cleaning Manipulators - Coil Lift Trucks - Furnace Charging Machines - Furnace Tending Machines - Hammer Crustbreakers - Ladle Charging Trucks - Molten Metal Carriers - Tapping Trucks GLAMA's experience of many years of producing machines with a unique combination of advanced control and rugged, reliable construction is evident in the several hundred machines now in service. GLAMA equipment withstands the heat, dust, vibration and battering of heavy industry while delivering precise handling performance. More details: www.glama.de

Goodfellow Corporation

Booth #344

Goodfellow supplies small quantities of metals, alloys, ceramics and polymers to meet the research, development and specialist product requirements of science industry worldwide. The company offers two distinct services: The first meets the needs of those customers who require small quantities of our standard catalog products for immediate shipment. The second is for those who require larger quantities or further processing of the company's standard products, or who need products, which fall within our general supply capabilities. Our web catalog lists a comprehensive range of materials in many forms including rods, wires, tubes and foils. There is no minimum order quantity and items are in stock ready for immediate shipment worldwide with no extra shipping charge. Custom made items are available to special order.



Company Descriptions

Gouda Refractories

Booth #419

Gouda Refractories is an innovative refractory producer (refractory bricks, castables, mortar, self-flowing castables, complex pre-cast shapes) with global experience and a long track record of supplying superior quality refractories all over the world, combined with innovative installation technology for more than 100 years.

Gouda Refractories develops, manufactures, sells and installs top quality refractory linings. Gouda's solutions play an important role in, non-ferrous metal (mainly aluminium), petrochemical, environmental and energy industries. Based on an industry-oriented structure and highly competent employees, Gouda Refractories guarantees an optimal support which results in efficiency and reduction of refractory cost. Gouda Refractories supplies total solutions to customers which are cost effective, state of the art, and reliable. Gouda's R&D department is conducted in close co-operation with its customers and renowned research institutes. Gouda's quality assurance is based on the international ISO 9001 standard.

Guangxi Bama Zhengyu Titanium Industry Co., Ltd

Booth #417

Guangxi Bama Zhengyu Titanium Industry Co., Ltd is a wholly-owned subsidiary of Shanghai Zhengyu Special Alloys Co.,Ltd. Zhengyu is a professional manufacturer of Aluminum master alloys and Aluminum alloying additives in China. Zhengyu has developed a worldwide reputation for supplying the quality products and excellent service to our global customers. Zhengyu products are marketed through sales offices in South America, North America, Europe, Turkey and Asia as well as sales agents in other area. In keeping with the company's corporate philosophy and commitment to excellence, Zhengyu maintains an active research and development facility and is ISO 9001:2008 certified.

Hencon BV

Booth #315

Hencon provides a complete range of heavy duty vehicles and vacuum technology solutions for aluminium smelters, aluminium foundries, light metal producers, industrial plants and mining applications. Originally a Dutch company, we developed a broad experience in the supply of solutions for customers in the light metal industry. With our solutions we want to make the difference for our customers and commit ourselves to measurable cost savings. Therefore we design machines that are safe to use and easy to operate and maintain. While at the same time our company is committed to offering you the support you require to make your business a success.

We think global and act local. This resulted in the unique concept of business units of Hencon on your doorstep: such as our service and production plants in the Netherlands,

Russia, South Africa, Mozambique and India up to today.

Our goal is to offer our customers solutions to enable them to strive for continuous operating excellence in the lower cost curve of the industry.

With Hencon, you select a partner who has over 55 years of experience in the industry. We translate this knowledge into a durable partnership that shows commitment, creativity and entrepreneurship, in order to make our customers excel. Whenever you would have questions about vacuum technology solutions, transport equipment and plant logistics; feel free to contact us for:

- Feasibility studies
- Know-how and analyses
- Training
- Support
- New equipment
- Maintenance solutions

Hencon offers tailor-made solutions with a clear eye for your specific needs and production processes. Combined with our know-how, we make the difference with solutions that offer you value for money.

Our clients can be find worldwide in the following countries: Argentina, Australia, Bahrain, Belgium, Brazil, Canada, China, Czech Republic, Denmark, Egypt, France, Germany, Greece, Hungary, Iceland, India, Indonesia, Cameroon, Mexico, Montenegro, Mozambique, Netherlands, New Zealand, Norway, Oman, Poland, Qatar, Romania, Russian Federation, Saudi Arabia, Slovakia, Slovenia, South Africa, Spain, Sweden, Switzerland, Turkey, United Arab Emirates, United Kingdom, United States of America and Venezuela.

Hirox-USA, Inc.

Booth #317

HIROX invented the first digital microscope over 25 years ago paving the road for new innovative microscopy. HIROX's high-quality optical, mechanical, and lighting designs have the capability of achieving an expansive magnification range from 0x-7000x. Also, HIROX's systems incorporate a variety of features, including 2D/3D measurement, HDR, anti-halation, and 2D/3D tiling. HIROX now introduces the KH-8700, with LED light source, full HD monitor, and the fastest 3D model construction in the industry.

Hysitron

Booth #336

As the world leader in nanomechanical testing, Hysitron® is dedicated to the development of next-generation testing solutions for nanoscale materials characterization. Hysitron's comprehensive nanomechanical testing suite of in-situ techniques (including TEM/SEM Nanomechanics, heating/cooling, nanoDMA®, and nanoECR®) and modular instrument platforms will keep you at the forefront of technology. Stop by our booth to learn about our exciting new developments and for in-depth discussions with our application specialists about our latest nanomechanical testing solutions.

Company Descriptions

ICE Publishing

ICE Science is a unique materials science journal series from ICE Publishing. This flagship series aims to deliver a truly holistic overview of the areas of materials science, biomaterials, nanotechnology, energy, green chemistry and surface engineering, bringing together communities that traditionally work in silos to inspire fresh thinking in how breakthrough research can be practically applied. Two new journals, Green Materials and Surface Innovations, will launch in March 2013. All 'ahead of print' articles and published issues will be free to read for the duration of 2013. ICE Publishing is the publishing division of the Institution of Civil Engineers and has over 175 years of experience of connecting research and practice in the field of engineering science. For more information please visit: www.icevirtual-library.com/science

Innovatherm GmbH + Co., KG

Innovatherm is the competent partner and the world market leader in anode baking technology. As a subsidiary of the LINGL Company, innovatherm operates in the aluminium industry, providing full service in combustion technology for reconstruction, fine tuning and optimization of existing anode baking furnaces as well as new furnaces including dry adsorption fume treatment plants.

For this purpose, Innovatherm has developed excellent process technologies and concepts with mathematical models, special components for the combustion like burners and gas valves, and future oriented control philosophies for optimal process management as well. For best results these concepts are custom-tailored to maximize plant safety, efficiency and economics.

Latest products established in the market are:
 ProBake Advanced Firing Systems for anode baking furnaces
 ProClean Fume Treatment Plants for the aluminium industry
 ProCast Supervisory Control Systems for primary and secondary Casthouses incl. charging management, target alloy calculation and melting optimization

International ALUMINIUM Journal

International ALUMINIUM Journal deals with all facets of aluminium's value chain from the production of the metal via its processing through to recycling. The editorial focus is on smelting and semis production including the suppliers of plant, equipment and technology. Consideration is given to economic, technical and environmental/ecological topics as well as other aspects that affect the metal and its product applications in the different target markets. Aluminium relevant research articles from companies and institutes are also published. The publication is thus of particular interest to smelters and remelters, semis producers, foundries, fab-

Booth #243

ricators and converters, metal traders, semis stock holders and research facilities. International ALUMINIUM Journal is circulated in over 40 countries worldwide – made in Germany, distributed to the world. Articles that are of global interest are published in English or bilingual (German and English).

Jervis B. Webb

Booth #316

Jervis B Webb Company is a recognized leader in the field of engineered material handling systems and equipment. Our full line of integrated material handling products are computer controlled to efficiently automate rod/anode assembly, and green or baked anode operations.

Our product line includes:

- Power and free conveyors
- Automatic Guided Vehicles
- Roller conveyors
- Heavy-duty chain conveyors
- Automated Storage and Retrieval Systems
- Custom designed automation equipment
- Baggage Handling Systems
- Airport Maintenance Services.

From raw materials handling and transport ... to anode, molten metal, and cast ingot handling ... to automated storage of work-in-process and finished product ... Jervis B. Webb Company has nearly 60 years of material handling and control experience in the Aluminum Industry.

Kempe International

Booth #407

Kempe is the largest provider of asset and maintenance services in the aluminium smelting industry. We have the most extensive product range within the industry and we are one of the top five global suppliers.

Kempe has recently supplied the Anode Rodding Shop and Anode Handling System for Ma'aden Aluminium and we are currently working on the commissioning of these facilities. We are also constructing the Bath Cooling & Processing Plant on EMAL Phase 2 along with various other projects.

Kempe works for 30 smelters across 7 regions – Australasia, Middle East, Africa, Asia, Europe, North America, and South America. We have in-house manufacturing in Australia, China, UAE & Mozambique.

Kempe has more than 1600 employees globally working in design, supply, manufacturing, construction and maintenance.

Kempe will be available at TMS to discuss potential client requirements in the areas of Anode Handling & Cleaning, Rodding Shops, Bath Removal (hot & cold), Bath Cooling & Processing, and other Carbon, Potroom and Casthouse equipment.



Company Descriptions

KT Grant, Inc.

Booth #514

KT Grant, Inc. has been providing safe automated refractory removal services to the melting industries since 1952. We offer both services and sales of equipment. We have developed many types of equipment and technics to provide safe, efficient and cost effective solutions for critical path melting applications. We offer; aluminum furnace tending and skimming machines, furnace hot cleaning and refractory gunning services, furnace, holder and ladle tear outs, cupola bottom dropping, glass regenerator clean-out services and many other refractory/scale build-up related services. With over 750 domestic customers and equipment in 38 countries we have the breadth to support our customers 24/7/365. www.kt-grantinc.com

Laeis

Booth #332

LAEIS offers hydraulic presses MEGA 2500/1600 AV for production of prebaked anodes. These presses are modifications of the renowned HPF presses, supplied more than 600 times to different industries, optimally adapted to anode production requirements. With die areas up to 1800 x 850 mm² and filling depth up to 1400 mm practically all anode formats can be produced. A vacuum system provides for optimal densification and even density distribution over the whole anode volume. The special weighing and mould filling system together with the sophisticated press control guarantees extremely high accuracy and reproducibility of anode weight and height. Depending on anode formats, production capacity is up to 50-60 t/h in a single line. The remarkably lower forming temperature results in higher green strength, avoids a separate water cooling and reduces the emission of PAH and other pitch volatiles.

Laser Distance Spectrometry

Booth #312

Laser Distance Spectrometry, the world leader in the cutting-edge laser spectrometric technology, is proud to present a new solution for stabilization of elemental composition of ore, ore mixture and final product: MAYA - a laser-based optical emission analyzer which determines the elemental composition of the material on the conveyor belt in real time. MAYA analyzer has high sensitivity, low limits of detection and high accuracy. It provides a simultaneous analysis of all the elements, including the light ones (Al, C, Mg, Si, etc.) At the same time, it uses no radiation and is therefore absolutely safe for the personnel and the environment, and does not require any special permits from nuclear authorities. The equipment pays for itself quickly, stabilizing the quality of the final product, increasing the volume of production, reduced consumption of water and expensive flotation reagents/magnetite.

Light Metal Age

Booth #436

Light Metal Age is the pre-eminent magazine of the light metal world. For 71 years, Light Metal Age has covered primary production and semi fabrication of aluminum, as well as titanium and magnesium. Circulation is international and goes to primary and secondary smelters; casthouses; extrusion operations; rolling mills; rod and wire mills; and foundries. Coverage of associated processes and equipment includes DC casting, surface technologies (such as anodizing), furnaces and melting, filtration, automation, and handling. Recipients are executives, plant managers, technicians, metallurgists, chemists, and engineers responsible for fabrication, production, and operations. Light Metal Age also produces select article archive content on DVDs, including the Aluminum Extrusion Article Archive (July 1943 – June 2012), the Magnesium Article Archive (May 1943 – August 2011), and the Titanium Article Archive (Nov. 1945 – Aug. 2009). For more info, visit our webpage: www.light-metalage.com.

LP Royer, Inc.

Booth #432

Attention workers in the metallurgical industry:

Since 1934, ROYER is your one stop supplier of innovative specialized safety footwear. Unique in America, our XPAN® dual density soling technology offers a lighter rubber sole, protecting the wearer from both extreme heat and cold temperatures. Moreover, this technology offers superior traction, shock absorption and durability. Visit us and see the ULTIMATE SMELTER'S BOOT!

ROYER offers a wide range of specialized products with customizable features including internal and external metatarsal protectors as well as nonmagnetic toecaps. ROYER products meet CSA, ASTM and CE standards.

Magneco/Metrel

Booth #437

Magneco/Metrel, Inc. is a refractory manufacturer that has developed a family of monolithic products referred to as "Metpump" for aluminum furnace applications. Metpump products can be applied in aluminum furnaces or vessels for small repairs to major construction.

Maney Publishing

Booth #534

Maney delivers a personalized service to authors, societies, readers and libraries for the publishing and international dissemination of high quality, peer-reviewed scholarly research. Specializing in print and electronic journal publishing, Maney is committed to technical and editorial innovation combined with traditional values of quality and collaboration. Maney publishes an impressive collection of highly regarded, peer-reviewed journals covering both niche and

Company Descriptions

general topics in materials science and engineering. Coverage ranges from fundamental research to engineering application and from the extraction and refining of minerals to the characterization, processing and fabrication of materials and their performance in service. Find out more online: www.maneypublishing.com/materials

Materials Innovation Learning Center Booth #325

Welcome to this year's Materials Innovation (MI) Learning Center - a TMS showcase and journey into the world of Materials Innovation @ TMS -- one of the Society's exciting strategic initiatives!

Visit the center, featuring interactive sessions, and learn more about Materials Innovation principles, activities, and resources that are transforming the future of materials and manufacturing innovation.

Browse the gallery and engage with TMS technical specialists who will provide online demonstrations of various materials innovation and ICME tools, databases, and other electronic resources.

While you're there, learn how to get involved and become part of Materials Innovation @ TMS as you explore these exciting areas at the TMS Materials Innovation Learning Center:

- The TMS-led study on Integrated Computational Materials Engineering (ICME)
- IMMI Journal
- The Orlando Materials Innovation Principles
- Materials Cyberinfrastructure Portal
- 3D Materials Atlas
- Materials Genome Initiative (MGI) Digital Data Community
- The TMS 2nd World Congress on ICME (July 7-11, 2013)

Materials Innovation @ TMS supports the goals of the Materials Genome Initiative (MGI) and is focused on significantly reducing the time and costs associated with materials development by building a seamless and dynamic innovation infrastructure that unifies and streamlines engineering design and manufacturing processes. A special feature of the TMS2013 Exhibition, the Materials Innovation Learning Center will be open throughout the conference during regular exhibit hours, so stop by often!

Mecfor Inc.

Booth #502

A leading North American heavy duty equipment supplier for the aluminium industry, Mecfor specialises in the concept, design and fabrication of mobile, stationary and custom designed equipment used in all sectors of the aluminium primary and secondary transformation industries. All equipment developed and fabricated at Mecfor takes into consideration the harsh working environment of aluminium mills.

Melting Solutions

Booth #506

Melting Solutions offer complete design and manufacturing solutions for Secondary Aluminum Scrap Processing.

We use the most technologically advanced methods for recycling all types of scrap. The key to profitable scrap recycling is optimization of energy, productivity and metal recovery.

Our furnaces include thermal oxidizers and gas filtration to ensure our plants are fully compliant with the highest worldwide standards. We also offer continuous casting lines to suit any size, from the smallest to the largest plant.

Melting Solutions brings together the complete plant, tailored to the specific needs of the recycler. For drosses and more contaminated scrap we offer the latest in Tilting Rotary Furnace technology. We also offer advanced reverb melting and holding furnaces with electro-magnetic stirring technology and excellent fuel efficiency.

Melting Solutions is part of the Interpower Induction Group.

For more information on our Secondary Aluminum Scrap Processing equipment, please select contact us at sales@meltingsolutions.com

Metallurgy & Materials Society of CIM Booth #532

We are a world class Canadian organization that serves society and the needs of professionals in the global metallurgy and materials community. The purpose of MetSoc is to serve our members, society and others involved in the research, development and application of the science and technologies for the environmentally responsible extraction, fabrication, utilization and recycling of metals and materials



Company Descriptions

Micro Materials Ltd

Booth #438

A wealth of mechanical property measurements in one instrument: The NanoTest Vantage system carries out a range of nanomechanical property measurements:

- Nanoindentation
- Nano-scratch and wear
- Nano-impact and fatigue
- Nano-fretting

Optimize material properties under true "in-service" conditions: The instrument can operate under a range of environmental conditions: high temperature up to 750°C, in liquids, and under non-ambient gases.

Unique capability: The high temperature testing module allows testing of a sample heated up to temperatures of 750°C. The patented MML nano-impact and fatigue system affords unrivalled information on fracture and fatigue behavior.

A trusted manufacturer: Established in 1988, MML's global customer base includes leading research institutes such as MIT, Cambridge and Oxford Universities.

Details from: Denise Hoban, International Business Development Director, denise@micromaterials.co.uk or www.micromaterials.co.uk

Microtrac

Booth #522

Microtrac, a pioneer of particle characterization technologies, strives to provide the world with innovative, reliable, and repeatable instruments that deliver insight and solutions to company's complex product and process problems. Microtrac's instruments can provide particle sizing, zeta potential, 3-D image analysis, molecular weight, surface analysis, and particle counting measurements. Microtrac also offers contract laboratory services, as well as, custom service plans designed to meet and exceed customer expectations.

Momentum Press

Booth #215

Momentum Press provides the very best information and knowledge on today's advancements in science, engineering, and applied technology. Our books in material science include such subjects as Transport Phenomena, X-Ray Fluorescence Spectrometry, and Modeling Solid-State Precipitation. All our books are written for practitioners, researchers, educational faculty, and students in print, ebooks, and in digital collections (on the ebrary platform). To learn more about our digital content collections, please visit www.momentumpress.net/library.

MTI Corp

Booth #231

MTI Corporation, founded in 1994 by a group of material researchers from MIT and UC Berkeley, has now become the leading manufacturer of oxide crystals and substrates in the world, thanks to venture capital from Silicon Valley. MTI continues to develop new crystal substrates and maintain high quality of its single crystal substrates. MTI is equipped with

the latest state of the art instruments, which allow achievement of the highest standard. We strive continuously to keep pace with customers' increasing demands on super-smoothness, super-flatness, and super-cleanliness. In 2000, by popular demand, MTI started to manufacture precision bench-top machines for material processing, analysis, and crystal wafer containers.

MTI currently operates three production factories in China. This allows for the possibility of providing high quality and low cost precision machines for material research and R&D Labs, including: low speed cutting saw, wire diamond saw, auto polishing machine, high temperature oven, tube furnace, X-Ray crystal orientation machine, and Mini XRD, as well as complete set of equipments for research of rechargeable battery materials. Simple to operate, low cost, and commitment to our customers is our priority. MTI strives to become the world's leader in bench-top machines for material lab.

MTS Systems Corp

Booth #222

Engineers and researchers worldwide rely on MTS for the testing technology and expertise required to support the research, development and production of advanced metals, composites and ceramics. Reliable, high-performance MTS solutions are deployed across a diversity of industries such as aerospace, power generation, civil engineering and automotive, accurately and efficiently meeting the most demanding materials testing requirements.

The MTS portfolio is engineered to address a full spectrum of materials testing requirements - from tension/compression to fracture mechanics to complex multi-axial fatigue studies at elevated temperatures. This portfolio features: high-performance servohydraulic, static-hydraulic and electromechanical testing systems; versatile, high-resolution controls; proven application software; precision accessories; robust environmental simulation systems; and unmatched service and support.

Explore the MTS booth and discover how innovative MTS test solutions and decades of industry expertise can optimize the effectiveness and efficiency of your materials research, development and production programs.

Nanovea Inc.

Booth #501

From the Irvine, CA office Nanovea designs and manufactures 3D Non Contact Profilometers, Mechanical Testers & Tribometers to combine the most advanced testing capabilities in the industry: Indentation Hardness, Scratch Adhesion, Wear Friction & 3D Non-Contact Metrology at Nano, Micro & Macro range. Unlike other manufactures Nanovea also provides Laboratory Services, offering clients availability to the latest technology and optimal results through improvements in material testing standards.

Company Descriptions

Nederman

Booth #346

Nederman is the world's leading manufacturer of industrial air filtration equipment. We develop, produce and market systems for the extraction of dust, smoke, vehicle exhaust fumes as well as industrial cleaning. Nederman also produces and sells a comprehensive range of hose and cable reels.

You can find information on our products at www.nederman.com or contact us at (800) 533-5286.

Netzsch Instruments NA LLC

Booth #227

Thermal analysis, thermal properties, calorimetry, & contract testing services; DSC, DTA, TGA, STA (Simultaneous DSC/DTA-TGA) from cryogenic to +2400C, evolved gas analysis by coupled FTIR & MS & GC-MS, specific heat measurement, Dilatometers for thermal expansion, thermal conductivity, thermal diffusivity by laser flash method from cryo to +2800C, DMA, TMA, DEA for in-situ thermoset cure monitoring, & adiabatic reaction calorimeters to measure thermal & pressure properties of chemical reactions.

NFC - China Nonferrous Metal Industry

Booth #337

Founded in 1983, China Nonferrous Metal Industry's Foreign Engineering & Construction Co., Ltd. (NFC) is a state-owned holding company. It is listed on Shenzhen Stock Exchange in 1997. As a China leading enterprise engaged in general contracting of overseas nonferrous metal (aluminum, copper, zinc and etc.) projects and resources development, it covers a wide spectrum from technical assistance, engineering design, equipment manufacturing, construction, supervision, installation and training to mining, beneficiation, smelting, processing and etc. It has been listed on ENR as one of the top 225 international contractors and the top 200 international design firms for many years. With competitive edges in technology and rich experience in EPC contracting, NFC is capable and willing to work with world partners by providing a portfolio of services including technologies, equipment supply and management.

NIST

Booth #230

NIST/Measurement Services Division NIST Standard Reference Materials supports accurate and compatible measurements by certifying and providing over 1300 Standard Reference Materials with well-characterized composition or properties, or both. SRMs are used to perform instrument calibrations as part of overall quality assurance programs, verify the accuracy of specific measurements and support the development of new measurement methods. The Standard Reference Data Group has provided well-documented numeric data to scientists and engineers for use in technical

problem-solving, research, and development. The Calibration Services are designed to help the makers and users of precision instruments achieve high levels of measurement quality and productivity.

NKM Noell GmbH

Booth #207

NNSC has built a strong technical force based on specialists who individually have up to 25 years experience in Primary Aluminium Industry for Potroom as well for Carbon Area, being the only independent equipment supplier. For more than 40 years on the market through its constitutive companies, with more than 1,000 cranes in operation worldwide, NNSC is developing its mission for the Primary Aluminium Smelters and Nuclear plants: > To be a global supplier of handling systems, process equipment and solutions, > To integrate the client's process objectives in the design of the products through a continuous flow of mutual exchange.

Olympus

Booth #213

Olympus provides portable handheld X-Ray Fluorescence (HHXRF) analyzers for simple, non-destructive sorting of challenging grade separations, alloy chemistry and grade ID in seconds. They provide highly specific material chemistry to rapidly and accurately identify pure metals and alloy grades. HHXRFs allow for testing of literally thousands of types of materials anywhere, anytime. For scrap recycling applications, our HHXRFs provide reliable ID in 1-2 seconds for most grades. They are designed for durability – to withstand the tough processing environment. Our HHXRFs are used for fast, reliable alloy sorting and analysis for a wide variety of ferrous and non-ferrous material. We provide optimized HHXRF configurations for cost-effective analysis when time is of the essence and when materials cannot be transported, damaged, or altered. Our X-5000 Mobile XRF analyzers offer maximum portable power with a closed beam configuration and large touch screen interface.



Company Descriptions

Opsis

Opsis is a worldwide supplier of gas monitoring systems for process control applications, industrial continuous emission monitoring and ambient air quality and fence-line monitoring.

Systems use open path UV-DOAS, FTIR and laser diode TDL technologies. Monitoring solutions are provided as integrated systems including gas measurements, additional sensors such as flow and temperature and software applications for reporting and networking.

Opsis systems have been implemented in applications in a wide range of industries globally, including aluminum smelters, power plants, incinerators, cement plants and sulfuric acid production plants.

The Opsis system does not need to extract any sample of the gas making it effective to measure reactive components such as ammonia, and strong acids. Same is applicable in case gas condition is either extremely corrosive or hot, or both.

Gaseous components that can be measured include, for example: SO₂, SO₃, NO_x, CO, CO₂, H₂O, NH₃, HCL, HF, CL₂, CLO₂, HCHO, BTX, O₃, Hg, HgTot. Measurements are certified under TUV, MCERTS and EPA.

A worldwide network of skilled distributor companies is available for sales and support. Opsis is a ISO 9001 and ISO 17025 certified company

Outotec Ltd.

Outotec develops and provides technology solutions for the sustainable use of Earth's natural resources. As the global leader in minerals and metals processing technology, Outotec has developed several breakthrough technologies. Outotec serves the light metals industries including the provision of cutting-edge alumina refineries and aluminum smelters. The company has over 50 years experience helping customers worldwide in both segments of the aluminum process to reach their goals. What sets Outotec apart from its competition?

They are there to help their customers from start to finish in terms of plant design, and they customize solutions to fit a client's specific needs. Outotec's processes and equipment have become industry standards and their references stretch back decades – a track record that has led to their current reputation as a leading innovative technology partner. The company also offers innovative solutions for the chemical industry, industrial water treatment and the utilization of alternative energy sources.

Booth #414

Parker Hannifin

Parker is the world's leading diversified manufacturer of motion and control technologies and systems. Parker provides precision engineered solutions for a variety of commercial mobile, industrial and aerospace markets. We design and manufacture optimal systems using fluid connectors, hydraulics, pneumatics, instrumentation, refrigeration, filters, electromechanical components, and seals required in motion control systems. Parker's experience in the aluminum industry spans more than 40 years. Parker has equipped machinery in all phases of aluminum production including smelters, casters and extruders through grinders, rolling mills and strip processing lines, etc.

Booth #326

Photron Inc

Photron offers a wide range of high-speed cameras; from HD resolution to 2,000 frames per second (fps), through dual miniature heads providing 2K fps for real time image processing, to the world's fastest mega pixel high speed camera providing reduced resolution to over one and a half million fps.

Booth #204

Proto Manufacturing

Residual stress affects crack initiation and propagation, fatigue life, stress corrosion cracking and distortion. For over 25 years, Proto Manufacturing has been providing both measurement services and equipment for measuring residual stress in metal components. Proto's leading edge x-ray diffraction (XRD) technology is portable, cost effective and provides the necessary data for making informed decisions about the health of components. Tel: 1-313-965-2900 E-Mail: proto@protoxrd.com Web: <http://www.protoxrd.com>

Booth #343

RHI AG

Refractory competence for the non ferrous metals industry: RHI is the world's leading supplier of high-grade ceramic refractory products and services. As a reliable and competent partner it is our constant aim to add value to the process of our customers by achieving the best price/performance ratio with our refractory system solutions.

Booth #239

The comprehensive program of products and services ranges from basic and non-basic mixes and bricks to prefabricated products, slide gate plates, purging plugs, as well as computer simulations like CFD or FEM. We also offer special machines, repair systems and technical equipment used to install refractory products into the various production units of the non ferrous metals industry. Our metallurgists are active around the globe and cooperate with renowned research facilities and universities to support the improvement of metallurgical processes and furnace integrity.

Company Descriptions

Riedhammer GmbH

Booth #411

Since 1924 dedicated to the design and construction of furnace plants for carbon products (OPEN as well as CLOSED type), RIEDHAMMER is presently the only independent supplier worldwide being able to deliver complete solutions and technology for baking of anodes, cathodes, electrodes and special carbon products. More than 85 years of experience and know-how guarantee a high economic efficiency and reliability of the plants. In total RIEDHAMMER has executed more than 300 bake furnace projects in 25 countries. Our reference list includes major global players in the production of primary aluminum with pre-baked technology as well as top suppliers of cathodes and electrodes respectively for the aluminum and steel industry.

Rio Tinto Alcan

Booth #201

Building on more than a century of experience and expertise, Rio Tinto Alcan is a global leader in the aluminium industry. We are one of the world's largest producers of high quality bauxite, alumina and aluminium worldwide and our AP™ smelting technology is the industry benchmark.

Our leadership is reinforced by our:
access to the largest and best quality bauxite reserves in the industry;
benchmark smelting technology; and
envious hydropower position, which delivers significant competitive advantages in today's carbon constrained world.

Rio Tinto Alcan is the aluminium product group of Rio Tinto, a leading international mining company involved in each stage of metal and mineral production. The Group is listed on the London Stock Exchange and Australian Securities Exchange under the symbol RIO. Rio Tinto's major products are aluminium, copper, diamonds, coal, iron ore, uranium, gold and industrial minerals

Secat, Inc.

Booth #427

Secat is a metallurgical research laboratory specializing in aluminum product and process technologies with ISO 17025:2005 certification. Secat has technical and marketing capabilities to serve various aluminum product sectors including: automotive, marine, aerospace, packaging, building & construction, electrical, and recycling. Secat assists companies with materials testing, failure analysis, alloy development, and the enhancement of processes and properties related to casting, forging, extrusion, rolling of plate sheet & foil, powder metallurgy, and foams & composites.

Sente Software Ltd.

Booth #335

We offer materials-focused software products for modeling the behavior and properties of complex alloys. The thermodynamic databases produced by Thermotech set the standard for the prediction of equilibrium and non-equilibrium structures in multi-component commercial alloys. Our latest product, JMat-Pro, is a unique software program for predicting phase transformations, physical/mechanical properties and solidification properties for complex alloys. It provides fast and robust calculations that have been extensively validated to ensure sound predictions of the properties. Our software combines industrial relevance with realistic physical models and user-friendly interfaces that work with "real" materials which are multi-component in nature and exhibit complex behavior. www.jmatpro.com.

Simpleware, Ltd

Booth #538

Simpleware develops industry-leading software solutions for the visualization and analysis of 3D image data (such as CT, micro/nanoCT, MRI, and Microscopy), and the seamless conversion into high-quality computer models used for CAD, Finite Element and CFD simulation.

Simpleware's powerful segmentation and meshing algorithms enable the rapid generation of highly accurate models, for example of soils, filters, composites and 'as built' parts. The models can be sent directly for FE and CFD analysis including predefined contacts, material properties, boundary definitions, etc. 2D and 3D measurements and statistics are also easily extractable. In addition, Scripting tools allow the creation of customized plugins.

STAS

Booth #403

STAS is a Canadian based company and a world leader in providing various equipment to improve the production and quality of molten aluminium. Aluminium producers who can benefit from such technologies are found throughout the wide variety of aluminium producers, from primary smelter plants down to secondary operations, including rolling mills and aluminium extruders. The company has been in business for more than 25 years, with clients on all continents. Most of STAS' sales activities are managed from STAS' head office in Canada, with a network of well known agents in specific countries or geographical areas.



Company Descriptions

Strem Chemicals Inc.

Booth #235

Established in 1964, Strem Chemicals manufactures and markets a wide variety of metals, inorganics and organometallics for research and commercial scale production for the materials science community including a wide range of MOCVD, CVD and ALD precursors & bubblers, metal-based Nanomaterials (including PURE nanoparticles that are reactant and surfactant-free) quantum dots (CdSe, PbS) and carbon nanomaterials (nanotubes, fibers, cones, CNT arrays, graphene). We also perform custom synthesis work and provide a variety of catalysts and ligands for organic synthesis, rare-earth and electronic grade chemicals for ultra high-purity needs and ionic liquids. Ask for our Catalog 23 (2010-2012) of over 4000 products.

and services supplied by Sunstone include anode paste, calcined pet-coke, cathodes, cold ramming paste, other lining materials and all kinds of equipments for aluminium smelters.

Sunstone

Booth #224

Sunstone is the largest anode exporter and one of the largest merchant anode manufacturers in China. It owns and operates two anode production facilities with an annual capacity of 520,000 metric tons. More than half of Sunstone's annual capacity is exported to more than 20 aluminium smelters all over the world. The company holds ISO 9001, ISO 14001 and OHSAS 18001 certifications. Other products

Techmo Car

Booth #415

Techmo is an Italian independent company focused in the engineering and production of special mobile and stationary equipment for the aluminium and non ferrous metals industry. The full range of purpose designed machines covers different types of equipment performing a large number of operations in pot-rooms, rodding shops and cast-houses. The Company's aim is to provide the most innovative, rational, cost effective and user friendly technical solutions. Among the most significant families of mobile equipment are the Tapping Vehicles, Anode Transporters, Crucible Transporters and Tilters, Alumina/ AlF₃ Feeding Vehicles, Furnace Charging Vehicles and Furnace Tending Vehicles, Multipurpose Anode Changers and Crust Breakers. Beside its line of purposed designed vehicles, Techmo provides a number of stationary equipment such as Crucible Cleaning Machines, the Crucible Tilting stations and the Anode Butts Cleaning Stations.



Designing the future of light metals

ARC Centre of Excellence for Design in Light Metals provides fundamental research in light metals



www.arclightmetals.org.au
arclightmetals@monash.edu



Company Descriptions

Tenova Core

Booth #435

Tenova Core is a worldwide leader in the supply of loose carbonaceous material calciners based on rotary hearth technology. These furnaces are used for the processing of petroleum coke, coal, formed coke briquettes and various other carbon based products. Tenova Core also provides a wide range of heat treating, reheating and specialty furnaces as well as technical and spare parts services. Booth Personnel: Thomas Walsh, Bill Barraclough, Bert Mangold; visit Tenova Core online at www.tenovacore.com.

Texas A&M University-Materials Science & Engineering Program

Booth #434

Materials Science and Engineering at Texas A&M University, an interdisciplinary graduate program, prepares tomorrow's professionals with a curriculum of fundamental and applied aspects of hard and soft materials, complemented by state-of-the-art practical research. The 50 materials faculty, responsible for \$15 million of research funding in the last fiscal year, advised 100 master and doctoral students, and, in 2011, published more than 420 publications in peer-reviewed journals.

Thermo Scientific

Booth #247

Thermo Fisher Scientific offers a comprehensive range of analytical instruments for materials science research including optical emission (OES) spectrometers, ideal for use in process/quality control for the direct, elemental analysis of solid metals and X-ray fluorescence (WDXRF/EDXRF) and X-ray diffraction (XRD) equipment, for spectrochemical/phase analysis of all types of materials (solids, liquids, powders). We also offer solutions using EBSD, EDS and WDS microanalysis systems and XPS spectrometers. Visit booth 242 at TMS 2013 or learn more on www.thermoscientific.com/xray or www.thermoscientific.com/oes

Thermo-Calc Software

Booth #429

Thermo-Calc Software is a leading developer of software and databases for calculations involving computational thermodynamics and diffusion controlled simulations. Thermo-Calc is a powerful tool for performing thermodynamic calculations for multicomponent systems. Calculations are based on thermodynamic databases produced by expert evaluation of experimental data. Databases are available for Al, Mg, steels, Ni-superalloys, Ti, solders and other materials. Programming interfaces are available which enable Thermo-Calc to be called directly from in-house developed software or MatLab. DICTRA is used for accurate simulations of diffusion in multicomponent alloys. TC-PRISMA is a new software package for the simulation of precipitation kinetics in multicomponent alloys.

Thorpe Technologies

Booth #236

Thorpe Technologies Inc designs and builds custom industrial furnaces, incinerators, and delacquering or decoating equipment for the aluminum industry. Thorpe offers many different configurations of melting and holding furnaces, including box or round, and stationary and tilting. Thorpe offers heat treating furnaces, including continuous, stationary batch homogenizing furnaces. Thorpe offers several different configurations of sowing preheat furnaces, including a shuttle sowing preheater and a flue preheater/melting furnace. Thorpe offers APROS technology delacquering systems for high recovery recycling of shredded scrap such as UBC. Please stop by our booth and let's discuss your furnace application.

UES, Inc.

Booth #425

RoboMet.3D® is a fully automated, serial sectioning system that generates two-dimensional data for three-dimensional reconstruction. With sectioning rates up to 100 times faster than manual sectioning, Robo-Met.3D collects data in a matter of hours, not months. Robo-Met.3D enables more time for data analysis and characterization and ensures repeatable and accurate data is collected in an efficient and cost-effective manner.

UES, Inc. is an innovative science and technology company that provides its industry and government customers with superior research and development expertise. We create products and services from our technology breakthroughs and successfully commercialize them.

STOP BY BOOTH 425 TO SEE ROBO-MET.3D IN ACTION!

VSG- Visualization Sciences Group

Booth #232

Visualization Sciences Group (VSG) is the leading provider of high-performance 3D visualization software for engineers, scientists, and software developers in materials science, biomedical/life sciences, natural resources and more. VSG is showcasing Avizo® Fire 3D visualization and analysis software for materials science. Avizo Fire software provides an extensive set of tools addressing 2D and 3D data visualization, materials characterization, reconstruction of 3D models, pore networks and flow analysis, permeability / molecular diffusion / electrical resistivity calculation, etc. Ideal for: synthetic porous materials, polycrystalline metals, geomaterials, and many more.



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