

■ *Linking science and technology for global solutions*

Exhibition Preshow Directory

See what companies have to offer you!

Exhibition Dates and Hours

Monday, March 13 noon to 6 p.m.

Tuesday, March 14 9:30 a.m. to 5:30 p.m.

Wednesday, March 15 9:30 a.m. to 3 p.m.



TMS2006

135th Annual Meeting & Exhibition



March 12-16, 2006
Henry B. Gonzalez Convention Center
San Antonio, Texas, USA



Table of Contents	Page
Furnace Workshop Schedule	2
Floor Plan	4
Exhibitor List	5
Product and Services Index.....	6
Company Descriptions	4

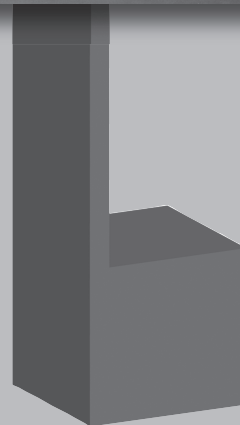
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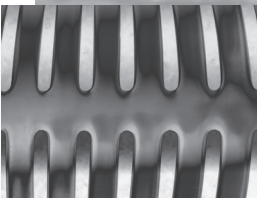
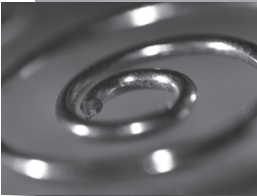
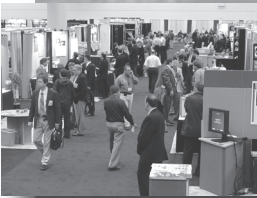
Grand Opening Reception

Enjoy complimentary food and drinks while visiting exhibitor booths.
Monday, March 13 • 5 to 6:30 p.m.

Furnace Systems Technology Workshop

“Practical Knowledge for Improved Process Performance”
Monday, March 13 – Wednesday, March 15





Furnace Systems Technology Workshop

“Practical Knowledge for Improved Process Performance”

Sponsored by TMS Light Metals Division

Learn about the fundamentals of process technology and the equipment involved in melting and process heating applications for aluminum and other nonferrous metals.

Cast house and melt house managers, plant engineers, and operations personnel will benefit from focused presentations by industry experts and follow-up discussions with commercial exhibitors:

- Identify cost and time saving opportunities.
- Reduce fuel consumption.
- Increase efficiency.
- Lower maintenance costs.

Presenting Companies:

Bloom Engineering	Hauck Manufacturing	Mechatherm	Thermcon Ovens B.V.
EMP/Pyrotek	Kromshroder	Praxair	Thorpe Technologies
Harbison Walker	Maerz-Gautschi	Seco Warwick	

Registration—Only \$100—Includes three-day workshop, exhibit, and aluminum industry plenary. Register via the meeting registration form on page 6 of JOM.

Presentation Schedule – Monday, March 13

Session 1: Combustion Process

Chair: Don Whipple, Bloom Engineering Co. Inc.

2:00 p.m. “Basics of Combustion” by Don Whipple, Bloom Engineering Co. Inc.

- Basics of generating heat through natural gas combustion
- Determination of portion of useable generated heat
- Mechanisms available to transfer energy to the load
- Methods to enhance the transfer and efficiently use the energy available

2:45 p.m. “Burner Types” by Jack Marino, Hauck Manufacturing Co. Inc.

Burners for melting and holding furnaces

- Traditional radiant flames
- High velocity flames
- Roof fired designs - flat flames and cone-type flames
- Alternating pulse regenerators
- Rotary regenerators
- Low NOx designs

Burners for Process Furnaces

- Direct fired - high velocity, flame shielding and low NOx designs
- Radiant tube fired - traditional designs, using recuperators, low NOx options and self recuperative SER designs

3:30 p.m. “Fuel to Air Ratio Control Systems” by Brian Hall, Kromshroder Inc

- Methods of controlling the fuel to air ratio in premix and nozzle mix burners
- Fixed air and modulated fuel
- Variable linked valve systems
- Pulse firing
- Pressure balanced systems
- Mass flow control
- Advantages and disadvantages

4:15 p.m. “NOx/CO Emissions” by Frank Beichner, Bloom Engineering Co. Inc.

- What is “NOx”?
- How is it formed?
- What affects the potential for NOx formation in the combustion process?
- Common methods for minimizing NOx formation
- Effect of techniques on CO emissions
- How is NOx measured?

Presentation Schedule – Tuesday, March 14

Session 2: Melters and Holders

Chair: Jan deGroot, Thermcon Ovens B.V.

8:30 a.m. **“Liquid Metal Furnaces in Aluminium Casthouses: Direct Charged Melting Furnaces”**
by Oliver Moos, Maerz-Gautschi Industrieofenanlagen GmbH

9:15 a.m. **“Well Charged Melters”** by Christopher Emes, Mechatherm International Ltd.

- Typical melt rates and fuel efficiency for open well charged melters
- Furnace sizing, burner input and burner/flue positioning
- Advantages of pumping/circulating for melt rate and fuel efficiency

10:00 a.m. **“Multiple Chamber Melters”** by Jan De Groot, Thermcon Ovens B.V.

10:45 a.m. **“Use of Rotary Furnaces in Aluminum Recycling”** by David Roth, MDY LLC

Session 3: Process Furnaces

Chair: Keith Boeckenhauer, Kromshroeder Inc.

2:00 p.m. **“Homogenizing Furnaces”** by John Allen, Thorpe Technologies Inc.

- Homogenizing process
- Features and performance of various homogenizing furnaces available on the market
- Quality of product
- Energy efficiency
- Emissions of homogenizing furnaces

2:45 p.m. **“Heat Treatment of Aluminum-Strip Coils - Furnace Designs and Concepts”**
by William Weyand, Seco Warwick Corporation

3:30 p.m. **“Pit-Chamber Furnaces Versus Pusher-Type Furnaces for the Preheat and Soak of Aluminum Rolling Slabs”** by Oliver Moos, Maerz-Gautschi Industrieofenanlagen GmbH

4:15 p.m. **“Delacquering Systems”** by Robert F. Jenkins, Thorpe Technologies Inc.

- Basic delacquering process
- Features and performance of various delacquering systems
- Types of scrap processed
- System stability
- Energy efficiency
- Emissions of delacquering systems

Presentation Schedule – Wednesday, March 15

Session 4: Additional Furnace Considerations

Chair: Alan Peel, EMP Technologies Ltd.

8:30 a.m. **“Refractory Selections for Aluminum Cast Houses”**
by John Sutton and Stan Smith, Harbison Walker Refractories Co.

- Operating trends in the aluminum industry
- Various ways to line furnaces with monolithic and brick construction

9:15 a.m. **“Melting Applications with Oxy-Fuel Firing”** by Sho Kobayashi, Praxair Inc.

Oxygen is used in many high-temperature industrial combustion processes to increase production and reduce fuel consumption. This presentation will introduce the basics and equipment of using oxy-fuel combustion for melting. In addition to the coverage of the operational benefits, the increase in melt rates and the reduction in fuel consumption with oxygen enriched air and pure oxy-fuel combustion will be quantified.

10:00 a.m. **“Metal Circulation”** by Alan Peel, EMP Technologies Inc.

- Positive impact of different metal circulation systems on the efficiency of melting and holding furnaces
- Different techniques and applications relating to different operating requirements demanded by cast house and foundry operations
- Types of circulation systems
- Appropriate selection to ensure benefits are realized

10:45 a.m. **“Flame Control and Furnace Control”** by Steve Ogonek, Krom Schroder

- Code requirements for flame supervision and furnace control systems
- Hardware available
- Suitability of hardware to processes
- Selecting appropriate hardware to meet process and code requirements

■ Linking science and technology for global solutions

As of 10/17/05

Exhibiting Company	Booth #
ABB Inc.....	108
Albany Research Center	521
Alcan Group.....	319
Aleastur	338
Almeq Norway AS.....	308
ALTECH SMV Ltd.	401
Aluminium International Journal.....	340
Aluminium International Today.....	120
Aluminium Times	506
Aluminum Corporation of China	313
APT Aluminium Process & Product Technology	428
AUMUND Fordertechnik GmbH.....	407
AZoM Network Group.....	621
B&P Process Equipment Systems LLC.....	402
Blasch Precision Ceramics Inc.	509
Bloom Engineering Co. Inc.	226
BMP Bi-Metal Products	518
Brochot SA	440
Buehler	519
Cambridge Scientific Abstracts.....	508
Carl Aug Picard GmbH & Co. KG	538
Carl Zeiss Microlmaging Inc.	535
Carl Zeiss SMT Inc.	347
Chongqing Runji Alloy Co. Ltd.	530
Claudius Peters	118
CompuTherm LLC.....	542
Taylor & Francis Group/CRC Press	504
Cytec Industries Inc.	439
Davy Process Technology (Switzerland) AG.....	219
DMC Clad Metal Division.....	353
EBSA Analytical Inc.....	539
ECL.....	216
Eirich Machines Inc.....	335
ENERGOPROM	520
ERICO Inc.....	400
FEI Company.....	139
FLSmith Group	341
GE Advanced Materials, Quartz.....	419
GE Energy	421
GE Water & Process Technologies	418
GLAMA Maschinenbau GmbH	412
Gouda Vuurvast N.V.....	431
Graphite Engineering & Sales	343
Groupe Refraco	135
Hamilton Research & Technology Pvt. Ltd.....	443
Hauck Manufacturing Co.....	525
Heggset Engineering.....	424
Hencon BV	232
Hereaus Electro-Nite Co.....	239
Hertwich Engineering	224
HMR Group AS.....	425
HRV Engineering Group.....	409
Industrial Heating Magazine	134
innovatherm GmbH+Co. KG.....	219
Jayne Industries.....	500
JEOL USA Inc.....	610

JOM.....	501
Kabert Industries Inc.....	325
KB Alloys Inc.....	413
KBM AFFILIPS B.V.	438
KEMPE International	238
Laeis GmbH.....	219
L.H. Marshall Co.	346
Light Metal Age.....	235
L.P. Royer Inc.	243
Maerz-Gautschi Industrieofenanlagen GmbH	420
Master Alloys Co.....	234
McAllister Mills/TRITEX LLC	125
MECFOR Inc.	425
Mechatherm International Ltd.....	512
Metallurg Aluminium	214
Metallurgical Society of CIM.....	543
METTOP GmbH	502
MEXTRA Eng. Extrativa de Metais	119
Mid-Mountain Materials Inc.....	433
Milward Alloys Inc.	333
MINTEQ International Inc.....	130
Murlin Chemical Inc.	334
Nalco Company	208
National Filter Media.....	534
NKM Noell Special Cranes GmbH.....	327
North American Manufacturing Co. Ltd.....	317
Novelis	301
Opsis AB.....	133
Outokumpu Technology Ltd.	225
Parker Hannifin	432
PCM/Image-Tek.....	128
PERI/PHYSICA	342
Plibrico.....	228
Precimeter Control AB.....	114
Pyrotek Inc.....	201
Rex Materials Inc.	129
RHI AG	615
Riedhammer GmbH.....	527
SELEE Corporation	100
SenTech Precimeter Inc.....	114
SETARAM Engineering	416
Skarveland AS.....	405
SMV AS.....	403
Solios Group.....	307
Springer	127
STAS.....	109
Stellar Materials Inc.	124
Techmo Car s.p.a.....	220
Thermal Ceramics	209
Thermcon Ovens B.V.....	339
Thermo-Calc Software.....	446
Thermo Electron Corporation/Niton.....	247
Thorpe Technologies Inc.....	115
U.S. Dept. of Energy/ Office of Energy Efficiency and Renewable Energy	121
VEXTEC Corporation	540
Wagstaff Inc.....	101
ZIRCAR Ceramics Inc.	511

Product and Services Index

Air Pollution Control Equipment

Bloom Engineering Co. Inc.
FLSmidth Group
GE Energy
innovatherm GmbH+Co. KG
National Filter Media
Opsis AB
SMV A/S
Solios Group

Aluminum Industry Wear Parts

B&P Process Equipment Systems LLC

Aluminum Production, Technology and Equipment

ABB Inc.
Almeq Norway AS
Aluminum Corporation of China
AUMUND Fordertechnik GmbH
BROCHOT SA
Davy Process Technology (Switzerland) AG
ECL
Eirich Machines Inc.
ERICO Inc.
GE Infrastructure--Water & Process Technologies
GLAMA Maschinenbau GmbH
Gouda Vuurvast N.V.
Hamilton Research & Technology Pvt. Ltd.
Hencon BV
Heraeus Electro-Nite Co.
Hertwich Engineering
innovatherm GmbH+Co. KG
Kempe International
Novelis PAE
Outokumpu Technology Ltd.
Parker Hannifin
Riedhammer GmbH
SETARAM Engineering
Solios Group
STAS
Techmo Car s.p.a.
Thermcon Ovens B.V.

Aluminum Quality

ABB Inc.
Cambridge Scientific Abstracts
FLSmidth Group
SenTech Precimeter Inc.
Thermo Electron Corporation/Niton

Aluminum Refining Systems

ABB Inc.
FLSmidth Group
National Filter Media
Pyrotek Inc.
RHI AG
STAS

Anode

Assembly

Almeq Norway AS
ALTECH SMV Ltd.
DMC Clad Metal
ECL
ENERGOPROM
ERICO Inc.
Hamilton Research & Technology Pvt. Ltd.
HMR Group AS
Riedhammer GmbH
SETARAM Engineering
SMV AS

Cleaning, Transportation

ALTECH SMV Ltd.
AUMUND Fordertechnik GmbH
ENERGOPROM
HMR Group AS
Kempe International
MECFOR Inc.
SMV AS
Solios Carbone
STAS
Techmo Car s.p.a.

Automation/Computer Simulation/Software

ABB Inc.
Alcan Group
CompuTherm LLC
Mechatherm International Ltd.
PCM/Image-Tek
PERI/PHYSICA
RHI AG
STAS
Thermcon Ovens BV
Thermo-Calc Software

Butt Crushing/Stripping

BROCHOT SA
ECL
Outokumpu Technology Ltd.
Solios Group
Techmo Car s.p.a.

Carbon

Paste Production and Equipment

Alcan Group
B&P Process Equipment Systems LLC
BROCHOT SA
Carl Aug Picard GmbH & Co. KG
Davy Process Technology (Switzerland) AG
Eirich Machines Inc.
ENERGOPROM
Hamilton Research & Technology Pvt. Ltd.
Laeis GmbH
Outokumpu Technology Ltd.
SETARAM Engineering
Solios Group

Technology and Supplies

Davy Process Technology (Switzerland) AG
ENERGOPROM
innovatherm GmbH+Co. KG
Riedhammer GmbH
SETARAM Engineering
Solios Group
STAS

Upgrade/Revamp

Davy Process Technology (Switzerland) AG
Solios Group

Casting

Alcan Group
Almeq Norway AS
BROCHOT SA
ECL
GE Advanced Materials, Quartz
Groupe Refraco
Hertwich Engineering
Mechatherm International Ltd.
Metallurg Aluminium
MEXTRA Eng. Extrativa de Metalls
Murlin Chemical Inc.
Novelis PAE
Outokumpu Technology Ltd.
Rex Materials Inc.
SenTech Precimeter Inc.
Solios Group
Thermcon Ovens B.V.
ZIRCAR Ceramics Inc.

Ceramic Filters and Silicon Carbide Products

Blasch Precision Ceramics
SELEE Corporation

Chemicals and Additives

Aleatur of America LLC
Cytec Industries Inc.
ENERGOPROM
GE Infrastructure--Water & Process Technologies
KB Alloys Inc.
Metallurg Aluminium
Milward Alloys Inc.
MINTEQ International Inc.
Nalco Company
SNF Inc.

Clothing - Protective

L.P. Royer Inc.

Combustion Technology

Bloom Engineering Co. Inc.
Hauck Manufacturing Inc.
innovatherm GmbH+Co. KG
North American Mfg. Co. Ltd.
Thorpe Technologies Inc.

Corrosion/Surface Treatment

DMC Clad Metal
GE Infrastructure--Water & Process Technologies

Cranes

BROCHOT SA
ECL
ERICO Inc.
NKM Noell Special Cranes GmbH

Degassing

ALTECH SMV Ltd.
Blasch Precision Ceramics
Graphite Engineering & Sales
Hertwich Engineering
Novelis PAE
Pyrotek Inc.
SELEE Corporation
SMV AS
STAS
Thermcon Ovens B.V.

Dross

Handling/Processing Equipment

Almeq Norway AS
ALTECH SMV Ltd.
GE Advanced Materials, Quartz
GLAMA Maschinenbau GmbH
Hencon BV
Hertwich Engineering
Kempe International
MECFOR Inc.
Mechatherm International Ltd.
Outokumpu Technology Ltd.
Rex Materials Inc.
STAS

Cooling/Removal

Hencon BV
MECFOR Inc.
Mechatherm International Ltd.
STAS

Engineering, Consulting, Contractors

ABB Inc.
Alcan Group
Almeq Norway AS
ALTECH SMV Ltd.
AUMUND Fördertechnik GmbH
Bloom Engineering Co. Inc.
CompuTherm LLC
Davy Process Technology (Switzerland) AG
GE Energy
Groupe Refraco
HRV Engineering
MECFOR Inc.
North American Mfg. Co. Ltd.
Outokumpu Technology Ltd.
PCM/Image-Tek
PERI/PHYSICA
RHI AG
Riedhammer GmbH
SETARAM Engineering
SMV AS
Solios Thermal
Techmo Car s.p.a.
Thermo-Calc Software
Thorpe Technologies Inc.
VEXTEC Corporation

Filtration

Kabert Industries Inc.
National Filter Media
Novelis PAE
Pyrotek Inc.
Rex Materials Inc.
SELEE Corporation
ZIRCAR Ceramics Inc.

Furnaces

ABB Inc.
Groupe Refraco
Hauck Manufacturing Inc.
Hertwich Engineering
Mechatherm International Ltd.
MINTEQ International Inc.
North American Mfg. Co. Ltd.
Riedhammer GmbH
SETARAM Engineering
Solios Group
Thermcon Ovens B.V.
Thorpe Technologies Inc.

Grain Refiners/Hardeners

Aleatur of America LLC
KB Alloys Inc.
KBM AFFILIPS B.V.
Master Alloys Inc.
Metallurg Aluminium
MEXTRA Eng. Extrativa de Metais
Milward Alloys Inc.

Graphite Parts

ENERGOPROM
Graphite Engineering & Sales

HF Measurement Systems- Pot Rooms/Stacks

ALTECH SMV Ltd.
Opsis AB

Ingot and Sow Casting, Handling and Stacking

Hertwich Engineering
MECFOR Inc.
Murlin Chemical Inc.
NKM Noell Special Cranes GmbH
Outokumpu Technology Ltd.
Thermcon Ovens B.V.
Thorpe Technologies Inc.

Instrumentation

ABB Inc.
Buehler
Carl Zeiss SMT Inc.
FEI Company
GE Infrastructure--Water & Process Technologies
Heraeus Electro-Nite Co.
JEOL USA Inc.
Opsis AB
SETARAM Engineering
Thermcon Ovens B.V.
Thermo Electron Corporation/Niton

Lubricants

GE Advanced Materials, Quartz

Master Alloys

Aleatur of America LLC
Chongqing Runji Alloy Co. Ltd.
KB Alloys Inc.
KBM AFFILIPS B.V.
Master Alloys Co.
Metallurg Aluminium
MEXTRA Eng. Extrativa de Metals
Outokumpu Technology Ltd.
ZIRCAR Ceramics Inc.

Material Handling

Almeq Norway AS
ALTECH SMV Ltd.
AUMUND Fördertechnik GmbH
GLAMA Maschinenbau GmbH
Hencon BV
Hertwich Engineering
HMR Group AS
Kempe International
MECFOR Inc.
Outokumpu Technology Ltd.
PCM/Image-Tek
Techmo Car s.p.a.
Thorpe Technologies Inc.

Materials Information Providers

AZoM Group

Measurement/Testing and Analysis

ABB Inc.
Buehler
Carl Zeiss MicroImaging Inc.
EBSD Analytical Inc.
Heraeus Electro-Nite Co.
Opsis AB
PERI/PHYSICA
Rex Materials Inc.
SenTech/Precimeter Inc.
Thermo Electron Corporation/Niton

Molten Metal Filtration Pumps

ABB Inc.
Hertwich Engineering
Novelis PAE
Pyrotek Inc.

Process Equipment

ABB Inc.
ALTECH SMV Ltd.
B&P Process Equipment Systems LLC
Davy Process Technology (Switzerland) AG
DMC Clad Metal
Eirich Machines Inc.
GE Infrastructure--Water & Process Technologies
Hauck Manufacturing Inc.
Heraeus Electro-Nite Co.
Hertwich Engineering
North American Mfg. Co. Ltd.
Novelis PAE
Opsis AB
RHI AG
Riedhammer GmbH
SETARAM Engineering
Solios Group
Thermo Electron Corporation/Niton
Thorpe Technologies Inc.

Publishers

Aluminium International Journal
Aluminium International Today
Aluminium Times
American Metal Market/Metal Bulletin
APT Aluminium Process & Product Technology
Cambridge Scientific Abstracts
Taylor & Francis Group/CRC Press
Industrial Heating
JOM
Light Metal Age
Metallurgical Society of CIM
Springer

Recycling/Scrap Processing

Almeq Norway AS
ALTECH SMV Ltd.
AUMUND Fördertechnik GmbH
Hertwich Engineering
Mechatherm International Ltd.
Murlin Chemical Inc.
Outokumpu Technology Ltd.
Skarveland AS
Solios Thermal
Thorpe Technologies Inc.

Refractory and Insulating

Products

Blasch Precision Ceramics
GE Advanced Materials, Quartz
Gouda Vuurvast N.V.
Groupe Refraco
Kabert Industries Inc.
McAllister Mills/TRITEX LLC
Mid-Mountain Materials Inc.
MINTEQ International Inc.
Murlin Chemical Inc.
Pyrotek Inc.
Rex Materials Inc.
RHI AG
SELEE Corporation
Stellar Materials Inc.
Thermal Ceramics
ZIRCAR Ceramics Inc.

Maintenance/Repair

ERICO Inc.
Gouda Vuurvast N.V.
Kempe International
Mid-Mountain Materials Inc.
MINTEQ International Inc.
RHI AG

Research and Development

Aluminium International Journal
Cambridge Scientific Abstracts
CompuTherm LLC
Cytac Industries Inc.
EBSD Analytical Inc.
Groupe Refraco
JEOL USA Inc.
KB Alloys Inc.
MECFOR Inc.
MINTEQ International Inc.
PERI/PHYSICA
Thermo-Calc Software
U.S. Department of Energy
VEXTEC Corporation

Sawing Systems

ALTECH SMV Ltd.
Buehler
Hertwich Engineering
MECFOR Inc.

Service Contractors

EBSD Analytical Inc.
GE Energy
Gouda Vuurvast N.V.
Nalco Company
Skarveland AS

Software

CompuTherm LLC
PERI/PHYSICA
Thermo-Calc Software
VEXTEC Corporation

Vehicles for Potrooms and Casthouses

Almeq Norway AS
ALTECH SMV Ltd.
GLAMA Maschinenbau GmbH
Henco BV
HMR Group AS
MECFOR Inc.
SMV A/S
Techmo Car s.p.a.

Water Cooling and Treatment

GE Infrastructure--Water & Process Technologies
Nalco Company

X-ray Diffraction

EBSD Analytical Inc.
Thermo Electron Corporation/Niton

Company Descriptions

ABB Inc.

#108

Quebec, Canada

www.abb.com/analytical

ABB is a leader in power and automation technologies that enable utility and industry customers to improve performance while lowering environmental impact. The ABB group of companies operates in more than 100 countries and employs about 115,000 people. ABB's Analytical and Advanced Solutions business unit designs, manufactures and markets high-performance analytical system solutions and spectroradiometers for petroleum, chemical, life science, metallurgy and remote sensing/aerospace markets. Building on its 30 years of experience in analytical instrumentation, the company, through a dedicated team of engineers, offers you the best solutions with its complete range of reliable analytical instruments for inclusions and dissolved hydrogen measurement: AISCAN, LIMCA II, Prefil@-Footprinter, PoDFA and Metallographic Analysis Service.

Albany Research Center

#521

Albany, Oregon

www.alrc.doe.gov

The Albany Research Center is a U.S. Department of Energy laboratory staffed by federal employees specializing in life cycle research starting with the formulation, characterization and/or melting of most metals, alloys and ceramics; casting and fabrication, prototype development; and the recycle and remediation of waste streams associated with these processes. We routinely solve industrial processing problems by investigating melting, casting, fabrication, physical and chemical analysis and wear, corrosion and performance testing of materials through the use of state-of-the-art equipment and analytical techniques.

Alcan Group

#319

Montreal, Canada

www.alcan.com

Alcan is a multinational, market-driven company and global leader in aluminum and packaging. With world-class operations in primary aluminum, fabricated aluminum, flexible and specialty packaging, aerospace applications, bauxite mining and alumina processing, Alcan is positioned to meet and exceed customer needs for innovative solutions and service. Alcan employs 70,000 people with operating facilities in 55 countries and regions. The company owns or has an interest in 22 smelters in 11 countries; it has enhanced its position as a leading low-cost producer of primary metal and is the worldwide leader in smelting technology. The acquisition of Pechiney increases Alcan's annual smelter capacity to 3.45 million tons, giving the company the largest share of low-cost capacity in the world. Pechiney's technological expertise positions Alcan as the global leader and supplier of choice to the aluminum industry.

Aleastur of America LLC

#338

Evansville, Indiana

www.aleastur.com

Founded in the 80s, Aleastur manufactures a range of grain refiners and master alloys for the aluminium industry. Aleastur concentrates mainly in the production of AlTiB alloys in rod. In 2003 Aleastur established Aleastur of America LLC with offices and a central warehouse in Evansville, Indiana, to meet the growing demands of the Canadian and U.S. markets and to demonstrate our commitment by providing enhanced service for products. Aleastur of America LLC maintains local warehousing stock of aluminium grain refiners, master alloys and hardeners (tablets and briquettes) for primary and secondary aluminium smelters, integrated extruders and foundries. Canadian and U.S. sales functions are managed by Aleastur of America LLC having selected distribution points with strategically located warehouses throughout both countries.

Almeq Norway AS

#308

Langhus, Norway

www.almeq.com

Almeq Norway AS is an engineering, marketing and production company for a wide range of equipment to the aluminium industry, in particular for smelters and foundries. The company is a leading supplier of its designed equipment as well as an export and marketing partner for other well accepted suppliers. Among machinery engineered and produced in Norway are crucible and tube cleaners, pot-liners and various electric drying and preheating systems. In cooperation with partners in Norway and abroad, Almeq delivers anode and metal transporters, and various pot room equipment. At TMS 2006, Almeq will focus on a new product range for the cast house, which includes metal treatment systems and metal weighing systems. 'We will also show the results of our implementation of 3-D construction tools giving our equipment a new "look."

ALTECH SMV Ltd.

#401

Kópavogur, Iceland

www.altech.is

ALTECH will present some new equipment and systems for the aluminium industry for improved environment, efficiency and economy for anode rodding shops, turnkey anode rodding shops, and special equipment such as: automatic stub straightening machines, rod straightening presses, stub equalizing machine, stub sawing and welding system, thimble removal press, stub protection system, semi-automatic casting machines, electric heaters for heating of ladles, crucibles, stubs and anode holes and the ALTRACK anode and rod coding and tracking system. For cast house: PPM-purification of pot room metal by automatic skimmer and metal purification injection rotors. We welcome you to visit our booth (#401) at the ALTECH Pavilion at TMS 2006 in San Antonio.

Aluminium International Journal

#340

Isernhagen, Germanywww.giesel.de

Aluminium International Journal - for industry, research and applications – has been the leading international journal (bilingual: German/English) since it began more than 80 years ago. It deals with everything that concerns the material, its extraction, processing, recycling and applications. Matters of economics and the ecological consequences of using aluminium are also considered. The scope of the month-by-month reporting includes scientific contributions and condensed information about new technologies and applications. The journal addresses aluminium producers, semis manufacturers, foundries, processors, metal and semis traders and, not least, research institutes concerned with aluminium. ALUMINIUM is circulated in over 40 countries worldwide – made in Germany, published to the world.

Aluminium International Today

#220

Redhill Surrey, United Kingdomwww.aluminiumtoday.com

Aluminium International Today—the leading international English language journal dedicated exclusively to the aluminium production and processing industries—is the professionals' choice! Founded in 1988 and now published six times a year, the journal consistently brings its readers a wealth of technical features aimed at providing producers and processors with information on the latest technologies, and business and market developments. Added to this is a regular digest of industry news, contracts, events, product reviews and conference coverage in regular foreign language editions, including Russian and Chinese. Aluminium International Today's editorial team has a firm background in the sector, and worldwide experience of the present day industry to provide coverage of significant events and advances.

Aluminium Times

#506

Shoreham by Sea, United Kingdomwww.mmcpublishings.co.uk

Aluminium Times circulates to over 65 countries of Europe and the Middle East with 4200+ copies each issue; more than any other aluminium journal. Our market is reaching primary and secondary producers, rollers and extruders plus other fabricators. From our booth at TMS and Aluminium Essen, we shall distribute our World Maps and Directories of Primary Smelters, Rolling Mills and Extruders. Aluminium Times is published five times a year, and its policy is to promote the equipment and supply sector to producers, rollers and fabricators. Aluminium is freely received by managers involved in the purchase chain based in Europe and the Middle East. Our next show to attend with a booth is Arabal in Egypt.

Aluminum Corporation of China

#313

Beijing, People's Republic of Chinawww.chalco.com.cn**APT Aluminium Process & Product Technology**

#428

London, United Kingdomwww.aluminiumtechnology.com

APT Aluminium Process & Product Technology is the only multimedia publication harnessing the power of print, CD-ROM and the Internet that provides an indispensable resource for all senior and technical management operating smelting and processing plants worldwide. APT Aluminium is the only groundbreaking publication promoting the latest applied processes and product technology throughout the international aluminium industry with contents of lasting value in each edition. APT Aluminium has the most expansive and targeted international circulation that reaches a readership of 70,000. This offers the best value for money for the serious marketing and advertising campaigns.

AUMUND Fordertechnik GmbH

#407

Venlo, The Netherlandswww.aumund.de

The AUMUND Group is a worldwide leader and specialist in the design, manufacture and supply of material handling equipment and systems. At TMS 2006, AUMUND Fordertechnik will present special crushers and cooling lines for hot grabbed bath from the cells for the aluminium industry for improved environment, efficiency and economy. We welcome you to visit our booths (#401-409) at the ALTECH Pavilion at TMS 2006 in San Antonio.

AZoM Network Group

#621

Penkhull, Stoke-on-Trent, United Kingdomwww.AZoM.com

Launched in 2001, AZoM.com has now become the Internet's leading engineering materials knowledge base dedicated to informing and educating engineers, designers and scientists from all industries and in academia about all types of engineering materials: metals, ceramics, polymers and composites, their processing and applications. Such has been the outstanding success of AZoM.com that it now averages over 540,000 visitor sessions per month (over 7.5 million site hits) and is highly ranked by all of the major search engines and is an 'Accredited News Source' for Google. AZoM.com is proven to be highly effective in connecting buyers and sellers of materials, materials-related services and associated products.

B&P Process Equipment Systems LLC

#402
Saginaw, Michigan
www.bpprocess.com

B&P Process Equipment (manufacturers of Baker Perkins machinery) is a supplier of specialized process equipment for the production of carbon paste, energetic materials, plastics, industrial chemicals, and for chemical separation. Many built since the 1930s are still in service. In 1952, the aluminum industry production requirements grew, and the Continuous Kneader became the preferred method of manufacturing carbon paste. Today, our batch mixers and continuous kneads are used worldwide in the production of carbon paste. B&P also offers a complete line of continuous pusher centrifuges for liquid/solid separation. B&P also has a joint venture with Battagion S.R.L., headquartered in Bergamo, Italy, for a broad line of mixing equipment.

Blasch Precision Ceramics

#509
Albany, New York
www.blaschceramics.com

Founded in 1979, Blasch Precision Ceramics manufactures complex refractory shapes via a patented injection molding process. Parts manufactured using this proprietary process have unique qualities that offer distinct advantages such as precise tolerances without machining ($\pm 0.5\%$), excellent thermal shock resistance, controlled porosity, sub-particle distribution control, and outstanding resistance to spalling, erosion and metal penetration. Parts intended for aluminum applications are treated with a proprietary nonwetting agent. Whether you need low pressure stalk tubes, rotary degassers, thermocouple protection tubes, porous plugs or immersion heater tubes, Blasch can deliver. Our dedicated engineers are available to develop materials and design parts that satisfy customer needs.

Bloom Engineering Co. Inc.

#226
Pittsburgh, Pennsylvania
www.bloomeng.com

Bloom Engineering, a global combustion company, specializes in problem solving through custom engineering. Product lines include low NOx burner designs, combustion pipe train components and control systems. Bloom Engineering optimizes the burner combustion pattern required for the application. Burner designs are based on extensive experience obtained in the ferrous and nonferrous industries, development laboratory tests, and computational fluid dynamics design techniques.

BMP Bi-Metal Products

#518
Fountain Valley, California
www.doall.com/bimetal.htm

BROCHOT SA

#440
Tremblay en France, France
www.brochot.fr

Activities in the light metal industries: BROCHOT designs, manufactures, carries out installation, provides after sales services and spare parts of special machines; complete plants. We also provide full turnkey solutions and integrated process solutions. With our three departments, BROCHOT – SYPRIM – BERGER, we propose the full range of equipment necessary for aluminium and magnesium smelters. BROCHOT is a world leader with: pot rooms--electric pot ramming machines, dross crucible skimming equipment (Ekumax), dross handling equipment (Ekumax); cast house--ingot casting and stacking lines, high throughput dross free ingot casting wheel; foundry--We resolve your nightmarish problems with our revolutionary process--full workshop supply or single pieces of equipment delivery among which we have developed a vacuum pressure pouring technology.

Buehler

#519
Lake Bluff, Illinois
www.buehler.com

For over half a century, Buehler has been the leading manufacturer of scientific instruments and supplies for cross-sectional analysis. Buehler products are used throughout the world by metallurgical laboratories, quality control departments and failure analysis facilities for the analysis of all types of materials including ceramics, composites, semi-conductors, metals, rocks and minerals, and plastics. You can visit us in booth #519 or on our Web site at www.buehler.com.

Carl Aug Picard GmbH & Co. KG

#538
Remscheid, Germany
www.capicard.com

Carl Aug Picard is specialized in manufacturing of high quality wear parts for continuous kneaders for the manufacture of green anodes for the primary aluminum industry. Picard manufactures kneading teeth, wearing plates/liners and screw flights out of different, highly wear-resistant qualities.

Carl Zeiss Microlmaging Inc.

#535

Thornwood, New Yorkwww.zeiss.com

Visit Zeiss' booth to experience the new Axio Imager upright digital microscope for routine and research. Highest optical performance is combined with maximum stability, exceptional ergonomics, and integrated intelligence for enhanced operating comfort. Also shown: Axiovert 200 MAT inverted high performance metallograph with brilliant optics, enhanced ergonomics, innovative optical techniques, unshakable stability and ease of use; LSM 5 PASCAL laser confocal system for surface topography and roughness measurement as well as the new AxioVision 4.3 imaging software for grain size analysis, nodule evaluation/identification, multi-phase analysis and measurement of dendritic arm spacing.

Carl Zeiss SMT Inc.

#347

Thornwood, New Yorkwww.smt.zeiss.com**Chongqing Runji Alloy Co. Ltd.**

#530

Chongqing, People's Republic of Chinawww.runjico.com

Chongqing Runji Alloy Co. Ltd. is owned completely by Chongqing Trust-Glory New Metal Company in China. Runji Alloy is dedicated to the development, manufacture and marketing of the specialty alloy tablet for the aluminium industry. Runji Alloy is fully ISO9001:2000 approved and offers the most complete range of the alloy tablet for the metallurgical industry. The alloy tablet and briquettes products mainly include AL/Mn, Al/Cr, Al/Fe, Al/Ni, Al/Ti, Al/Pb, Al/Ta, etc., and we have our own Manganese mine and Manganese metal plant and deep relation with an iron powder plant which can greatly supply all different raw material to support the Runji Alloy tablet production today. The company (CTG) is also the largest supplier of silicon metal in China.

Claudius Peters

#118

Dallas, Texaswww.claudiuspeters.com

Across the globe, in the field of materials handling and processing, there is a name that is synonymous with innovation and technical excellence. Claudius Peters is active across a broad spectrum of industries. From roots established in the cement industry over half a century ago to a major provider of aluminum components to the aerospace of today, we have grown and diversified to become one of the most trusted names in industry, providing materials handling and process technologies, either individually or turnkey. From conception to installation, through commissioning to after-sales support and facilities management, Claudius Peters provides world-class service to world-class clients.

CompuTherm LLC

#542

Madison, Wisconsinwww.compuTherm.com**Also find us on page 50 of JOM!**

CompuTherm LLC, expertise in thermodynamics of multi-component alloys, has been providing software, databases and consulting services for industrial and academic uses since 1998. Pandat is a versatile software package for calculating phase diagrams and thermodynamic properties of multi-component systems. Intelligence, reliability and friendly user-interface are three major features of Pandat. No initial values are required for any type of complex calculation. Pandat, when combined with thermodynamic databases: PanNi, PanTi, PanFe, PanMg, PanAl, Adamis solder, and Cu alloys available at CompuTherm, is a powerful tool for alloy design and processing optimization of a variety of advanced materials. We also provide consulting services and develop special functions for customer needs. With Pandat, you know you are calculating the correct phase diagrams!

Cytec Industries Inc.

#439

West Patterson, New Jerseywww.cytec.com

Cytec's alumina processing chemicals team has delivered breakthrough products to our Bayer Process customers—and there's more to come. From our recently renovated technology center in Stamford, Connecticut, some of the best surface and polymer chemists in the business are overcoming challenges to our customers' expansion and profitability plans. We can help our customers achieve improved performance with products that assist with yield or throughput-based production increases, often without capital expenditures. Cytec is a leader in the development of innovative solutions to the global alumina and mineral processing industry. What can Cytec do for you?

Davy Process Technology (Switzerland) AG

#219

Pratteln, Switzerlandwww.davyprotech.com

Davy Process Technology (Switzerland) AG - short DPT, the former BUSS AG, is the world leader for carbon paste technology, being the sole supplier to the aluminium industry of the well known BUSS KNEADER for anode paste mixing. To underline this claim, we are proud to present our latest development, the 80 t/h BUSS Horizontal Paste Line (BUSS HPL). The first of its kind, this single line solution includes all the well known features of the BUSS KNEADER which have been further improved. The BUSS HPL guarantees the right paste quality for trouble-free anode forming and baking, resulting in the best anodes available for smooth operation of the pot rooms. We lower your net carbon consumption! Our unsurpassed services include the supply of genuine spare parts from stock and revamping or upgrading of existing installations.

DMC Clad Metal

#353

Boulder, Colorado

www.dynamicmaterials.com

DMC is the world's leading manufacturer of explosion welded products. DMC manufactures Detaclad® explosion clad at its Nobel-clad factory in France, its Nitro Metall factory in Sweden and its Mt. Braddock Clad Metal factory in the U.S. Virtually any metal combination can be welded using the Detaclad® process. High quality clad plates are supplied for manufacture of autoclaves, pressures vessels, heat exchangers and tanks. DMC also supplies a large range of bimetal welding transition joints for making fully welded connections of aluminum-to-steel and aluminum-to-copper.

EBSD Analytical Inc.

#539

Lehi, Utah

www.ebsdanalytical.com

EBSD Analytical Inc. offers complete microstructural analysis services for scientists and researchers worldwide. We specialize in electron backscatter diffraction (EBSD) and EDS techniques, and guarantee the quality of our results. In addition to providing comprehensive analytical reports, we also provide high resolution EBSD data collection only on a Schottky FEG SEM for customers who wish to do their own analysis. Our consulting services include custom on-site software and hardware training to ensure you are getting the most out of your own EBSD or EDS system.

ECL

#216

Ronchin, France

www.ecl.fr

With more than 46 years experience, ECL is the only smelter equipment manufacturer to be 100% dedicated to the aluminium industry. ECL offers complete solutions for the smelter's reduction sector (PTM, transfer and pot equipment), carbon sector (FTA cranes, anode handling and rodding shop), and metal sector. From design to erection, through to maintenance and refurbishment, ECL provides products and services adapted to the needs and demands of its customers, whatever the reduction technology. With subsidiaries in Australia, China, South Africa, Mozambique, Bahrain and the Netherlands, ECL is committed to providing the highest quality equipment and support to its customers.

Eirich Machines Inc.

#400

Gurnee, Illinois

www.eirichusa.com

Eirich Machines Inc. of Gurnee, Illinois, is a manufacturer of the Eirich Intensive Mixer, noted for the many advantages it provides the metallurgy industries, including significantly reduced process times, pronounced vertical and horizontal movement, and high speed mixing pan rotation facilitating faster mixing and faster discharge; low maintenance, low wear-no lubrication points in the mix, large access doors, no contact between product and shaft seals, no material build up due to wall/bottom scraper; cost effective - 75.6% of connected power available for mixing, lowest operating cost over lifetime of any mixer, minimum 20 years life expectancy, without rework.

ENERGOPROM

#520

Moscow, Russia

www.energoprom.ru

ENERGOPROM is the world supplier of carbon and graphite products to the major industries: aluminium, steelmaking, iron-making, ferroalloys industry. ENERGOPROM markets the output of leading Russian electrode producers - Novosibirsk Electrode Plant, Novochoerkassk Electrode Plant, Chelyabinsk Electrode Plant - who are the members of the Russian Carbon & Graphite Association "Uglegrafit."

ERICO Inc.

#400

Solon, Ohio

www.erico.com

ERICO® is a leading designer, manufacturer and marketer of precision-engineered specialty metal products serving global niche product markets in a diverse range of electrical, commercial and industrial construction, utility and rail applications. Headquartered in Solon, Ohio, ERICO has a network of sales locations serving more than 25 countries with manufacturing and distribution facilities worldwide. ERICO's brands include: CADDY® fixings and fasteners; CADWELD® welded electrical connections; CRITEC® surge protection devices; ERICO® rail bonds; ERIFLEX® low-voltage components; ERITECH® lightning protection and grounding; and LENTON® mechanical rebar splices. Visit ERICO online at www.erico.com

FEI Company

#139

Hillsboro, Oregonwww.feicompany.com

FEI's Tools for Nanotech™, SEM, TEM, and DualBeam™ FIB/SEM instruments are ideal for studies of materials, metals, and minerals, enabling advanced characterization and analysis at nanoscale dimensions. New DualBeam EBSD provides 3-D crystallographic data. FEI SEMs offer imaging and analysis solutions for challenging samples such as powders, polymers, films, carbon nanotubes, nanoparticles, porous and organic materials. Quanta SEM series adds in-situ dynamic experiment capabilities for humidity cycling, stress testing and high temperature studies. FEI TEMs, known for ease of use, deliver atomic resolution imaging and characterization of materials, with new Titan TEM supporting structural research at the sub-Å scale.

FLSmidth Group

#341

Bethlehem, Pennsylvaniawww.flsmh.com

The FLSmidth Group of companies is involved in many aspects of alumina refining and smelting and will present an overview of its technology at the 2006 TMS show. FFE Minerals provides sizing and grinding equipment for bauxite, gas suspension calcinations systems for alumina and solid liquid calcination systems for liquid purification. FFE also provides complete coke calcinations systems for use in anode production. FLSmidth Airtech provide a wide line of environmental control equipment for particulate and SO₂ control including electrostatic precipitators, fabric filters and semidry scrubbing systems. Moeller Materials Handling provides dense phase conveying systems, direct pot feeding systems, dosing systems for fume treatment centers and a wide line of bulk unloading and storage equipment.

Gautschi™

#219

Tägerwilien, Switzerlandwww.maerz-gautschi.ch

Gautschi, the Aluminium Division of MAERZ-Gautschi, is a leading supplier of equipment for primary aluminium casthouses and recycling plants. The product range 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 (now exclusive worldwide).

GE Advanced Materials, Quartz

#419

Cleveland, Ohiowww.advceramics.com

GE Advanced Materials, Quartz (previously GE Advanced Ceramics) is a leading producer of advanced ceramic (nonoxide) powders, and hot-pressed and chemically vapor deposited shapes. GE produces boron nitride powders, coatings, hot-pressed shapes, and composites for metallurgical and other applications. Boron nitride coatings are nonwetting and inert with aluminum, magnesium, and related alloys and drosses, and provide outstanding lubricity and refractory properties. Innovative boron nitride solids and composites possess unique properties including outstanding release, wear resistance, and inertness in aggressive environments, which make them broadly useful for metallurgical processes.

GE Energy

#421

Kansas City, Missouriwww.gepower.com

GE Energy's environmental services team serves minerals, metals and materials producers worldwide with integrated and flexible emissions control technology and services for the entire system. GE Energy offers the BHA line of baghouse and precipitator air pollution control solutions, as well as CEMS, remote monitoring and diagnostics, ISO certified stack testing and more. GE evaluates your whole process and applies the right technology to help improve the performance of your existing assets. This creates value by providing cost-effective alternatives to buying new equipment or systems.

GE Energy's solutions are designed to minimize operating and maintenance costs, helping provide higher performance for longer periods of time. With GE Energy's offerings, you can simultaneously focus on emissions goals and improved performance to help meet production, maintenance, and profitability goals.

GE Water & Process Technologies

#418

Trevoise, Pennsylvaniawww.gewater.com

GE Water & Process Technologies, a unit of General Electric Company, is an industry leader in solving the world's most pressing water reuse, industrial, irrigation, municipal, and drinking water needs. Through desalination, advanced membrane, separation solutions, and water reuse and wastewater management and process technologies, GE delivers value to its customers. GE provides value by improving performance and product quality, reducing operating costs, and extending equipment life through a broad range of products and services that are designed to optimize total performance; protect customers' assets; prevent corrosion, fouling and scaling; and safeguard the environment through water conservation and energy reduction.

GLAMA Maschinenbau GmbH

#412

Gladbeck, Germany

www.glama.de

GLAMA has designed and built heavy-duty mobile equipment for aluminium pot rooms, cast houses and anode rodding shops throughout the world for almost 30 years. The following types of mobile equipment are available: anode changing vehicles, hammer crustbreakers, tapping trucks, anode pallet transporters, furnace charging machines, furnace tending machines, molten metal carriers, ladle charging trucks, butt cleaning manipulators and coil lift trucks.

Gouda Vuurvast N.V.

#431

Gouda, The Netherlands

www.goudavuurvast.nl

Gouda is an innovative refractory producer (bricks and monolithics) 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 creates, manufactures, sells and installs top quality refractory linings. Gouda's solutions play an important role in aluminium, ferrous and non-ferrous metal, petrochemical, environmental and energy industries. Based on an industry-oriented structure and highly competent employees, we guarantee an optimal support which results in efficiency and reduction of refractory cost. Also 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. Besides our head office in Gouda, we also have sales locations in Australia, Belgium and Germany. Gouda offers a total care package: manufacturing (refractory bricks, castables, mortar, self-flowing castables, complex pre-cast shapes), engineering, research and development, and installation (several new techniques such as: pumping, shotcreting).

Graphite Engineering & Sales

#343

Greenville, Michigan

www.graphite-eng.com

Graphite Engineering & Sales is a customer-oriented company specializing in cutting and machining graphite products. The level of excellence we demand of our quality and service have provided Graphite Engineering with continuing success and growth. Graphite Engineering will have on hand knowledgeable sales engineers to answer any questions you may have. Graphite Engineering specializes in machining graphite per your specifications. Graphite Engineering will be displaying nuts and bolts, brazing fixtures, degassing shaft and rotor, canister inserts, run-out plates, molds, secondary billet casting rings, heating elements, electrodes, crucibles, sintering trays, sintering boats.

Groupe Refraco

#135

Chicoutimi, Quebec, Canada

www.refraco.com

At the source of solutions...since its foundation in 1995, Groupe Réfraco has offered refractory manufacturing maintenance, engineering and research services to clients primarily in the aluminium, steel, cast iron, pulp and paper, cement and mining industries. Through its innovation and initiative, it has built a reputation for excellence and proven itself to be an invaluable source for refractory solutions. The personalized, cordial, open and enduring relationships that Groupe Réfraco builds and maintains with its clients and partners are at the heart of its success. The resulting atmosphere of trust promotes a high level of collaboration that allows effective and efficient solutions to be found.

Hamilton Research & Technology Pvt. Ltd.

#443

Kolkata, India

www.hamiltonresearch.com

Hamilton Research & Technology Pvt. Ltd. (HART) provides process automation solutions for the aluminum industry. HART's cost-effective technology solutions are available for Soederberg and prebaked pots of various sizes. HART's distributed control system for aluminum smelters uses individual Electronic Pot Controllers (EPC) as distributed control elements connected to a central computer system. Proprietary control algorithm, designed by internationally renowned aluminum experts and developed by Indian software experts, is customized to parameters of individual smelters leading to optimum current efficiency. Systems have been implemented in major aluminum smelters in India (INDAL, HINDALCO, MALCO) and in Russia (SaAZ, BrAZ). HART has implemented a third generation heating regulation system for carbon anode baking plants. Individual controllers control the air inlet, draught and burner firing, to provide accurate adherence to the ideal heating curve.

Hauck Manufacturing Co.

#525

Lebanon, Pennsylvania

www.hauckburner.com

Hauck Manufacturing Company designs, builds and markets a wide range of combustion products. Hauck burners, blowers and controls products are key components in industrial heat processing equipment used by most industries utilizing thermal energy. In business for over a century, Hauck has earned an outstanding reputation for its products, and the loyalty of customers nationally and in world markets.

Heggset Engineering as

#424

Kristiansund, Norway

www.heggset.no

**Hencon BV**

#232

Ulf, The Netherlandswww.hencon.nl

Backed by more than 50 years of experience, Hencon Holland is a worldwide supplier of "Special Mobile Equipment" for the aluminium industry. Besides the main plant in The Netherlands, Hencon has production and maintenance facilities in South Africa, Mozambique and Russia. The delivery program covers the complete range for the potroom and the casthouse, such as furnace charging machines; furnace tending machines; hot metal transport and tilting vehicles; multipurpose vacuum cleaners; anode pallet transporters; tapping trucks; anode changing machines; alumina/fluoride/soda/bath feeding trucks; anode covering trucks; cavity cleaners; crust breakers; anode briquette feeders; rack raising trucks; manifold handling trucks; anode spading/tamping trucks; side loading forklift trucks; and platform lifting trucks.

Heraeus Electro-Nite Co.

#239

Langhorne, Pennsylvaniawww.electro-nite.heraeus.com

Heraeus Electro-Nite Co., the market leader in molten metal sensor technology, has introduced the 9 Box Control strategy to many smelters worldwide. This provides a total system for a more efficient cell operation with a stable bath temperature and chemistry control. The incorporation of the Cry-O-Therm superheat sensor, CV-Therm (bath temperature and CVD) and Positherm-AL© (bath temperature) in aluminum reduction cell control have given improved metal production, less energy consumption and longer expected pot life. The Cry-O-Therm system will be on show to demonstrate the measurement of superheat. Also, the Digilance IV AI, the latest technology for bath temperature/CVD measurement, combined with the latest data logging/IR down-loading capabilities will be displayed.

Hertwich Engineering

#224

Braunau, Austriawww.hertwich.com

Based in Braunau, Austria, with an office in the U.S.A., this supplier of equipment to the aluminum industry will be showcasing its entire line of products, including: fully automatic inline and stand-alone ultrasonic inspection stations, continuous homogenizing and cooling systems ranging from 8,000 tpy up to 160,000 tpy, fully automatic billet sawing and stamping plants, briquetting presses, fully automated billet and log stacking systems complete with bundle manipulation. Newly introduced equipment will include ingot casting lines (water free), contaminated scrap melting furnaces, rotary tilting furnaces and complete compact remelt operations for the processing of extrusion scrap into fully homogenized extrusion billet.

HMR Group

#425

Husnes, Norwaywww.hmr.no

For nearly 50 years, HMR Group of nine companies supplies products, equipment and engineering advice to the aluminium industry. Our potroom vehicles, anode stud bars and collector bars are used in all Hydro Aluminium's smelters in Norway. We obtained this position by continuous development of our competence, reliability and competitiveness. Contact us for information regarding potroom vehicles and equipment, including tapping vehicles, anode changing, feeders, spading vehicles, wheel crust breakers, etc.; pot construction and start-up, including potshells; superstructures; busbars and flexibles installation; anode stud bars; collector bars; anode yoke and rod assemblies. During TMS 2006, we will feature an upgraded model of a tapping vehicle and more to meet the future demand for mobile equipment.

HRV Engineering Group

#409

Reykjavik, Icelandwww.hrv.is

HRV Engineering Group is an alliance of three of Iceland's largest and long-established engineering consultants – Hönnun, Rafhönun, and VST. HRV Engineering Group has played a leading role in a range of local and international construction projects, including Iceland's three aluminium smelter plants. Drawing on extensive professional skills and technical expertise, acquired over decades of operating in some of the world's extreme climates and toughest geological conditions, HRV Engineering Group offers clients the portfolio of services, advice and solutions required to take any project, regardless of size, from drawing board to completion. These range from prefeasibility and environmental impact assessment, to design, construction and project management. HRV is the EP engineer for the NORDURAL expansion project in Iceland and a partner to Bechtel regarding the new 322,000 ton Alcoa Fjarðaál smelter.

Industrial Heating Magazine

#137

Pittsburgh, Pennsylvaniawww.industrialheating.com

Industrial Heating is the leading thermal processing journal in the world. As the industry's largest and most preferred publication, Industrial Heating has over 23,000 monthly subscribers. Written for thermal process engineers, articles deal with nonferrous and ferrous thermal processing technologies and practices. Please come to our booth and take a FREE copy of our publication.

innovatherm GmbH+Co. KG

#219

Butzbach, Germany

www.innovatherm.de

innovatherm GmbH+Co. KG is concerned with thermal processes and has specialized in tuning, reconstruction and optimization of existing furnaces. Especially in the field of the anode baking process, innovatherm has gained many years of experience in open and closed pit, single and triple baffle furnace technology. innovatherm continues and improves the former Leisenberg technology for firing and control systems for anode baking furnaces.

Jayne Industries

#500

Stoney Creek, Ontario, Canada

www.jayneindustries.com

Jayne Industries manufactures the complete line of stainless steel V anchors, c clips, studs and threaded products for refractory and ceramic fiber linings. Jayne has provided products and services to the aluminum, and other nonferrous and ferrous industries for over 30 years. Hexmesh and accessories, as well as Jayne large volume refractory pan and paddle mixers, are manufactured at our Stoney Creek, Ontario, Canada facility. Jayne also supplies cast alloy castings and Fibercon stainless steel fibers for refractories. Visit our booth (#500) to further discuss your anchor and hardware requirements.

JEOL USA Inc.

#610

Peabody, Massachusetts

www.jeolusa.com

JEOL is a leading global provider of electron optical instrumentation for high-end scientific and industrial R&D. Innovative technologies and award winning services promote advances in materials science, nanotechnology, biotechnology and biology. Core products include electron microscopes for failure analysis, inspection, high resolution applications and semiconductor equipment (e-beam lithography, defect review and inspection tools, and wafer process monitors).

Kabert Industries

#325

Villa Park, Illinois

www.kabert.com

Since 1960, Kabert Industries, Inc. has been furnishing the aluminum industry with casting supplies. Fiberglass cloth, an inexpensive and effective method of nonferrous molten metal distribution and filtration, is specially woven for the aluminum industry. In addition to roll goods, the cloth can be cut and sewn into mini channel bags, trough socks and other shapes. Other products available include gaskets, primarily used to seal and insulate troughs. Kabert also is a leading supplier of vacuum formed shapes and board. New product enhancements are routinely developed to improve the overall performance of the products we make. We are proud of our reputation in the aluminum industry. Our total commitment is focused in continuing to offer our customers across the world the latest technology and unparalleled service at competitive rates.

KB Alloys Inc.

#413

Robesonia, Pennsylvania

www.kballoys.com

KB Alloys Inc. produces aluminum-based master alloys including TIBOR®, TITAL®, and TICAR® grain refiners, binary hardeners and special purpose alloys, including BORAL®, strontium-aluminum, strontium-boron (STROBOR®) and beryllium aluminum. The master alloys are available in a variety of convenient-to-use forms including coiled rod, cut rod and ingot. With the use of statistical process control, KB Alloys controls its processes from alloy conception through all the manufacturing steps, including raw materials, process monitoring and product testing, to on-time delivery of quality products. Anglo Blackwells Ltd. produces strontium-aluminum and other specialty alloys. KB Alloys is the exclusive distributor for NGK Metals' beryllium-aluminum and Bostlan's compacted hardeners. KB Alloys recently announced a joint venture in China with plans to offer products into the Asian market from this operation.

KBM AFFILIPS B.V.

#438

Oss, The Netherlands

www.kbmaffilips.com

KBM AFFILIPS is dedicated to the development, manufacture and marketing of specialty master alloys for the metallurgical industry. The company is backed by manufacturing facilities located in the Netherlands (KBM) and Belgium (AFFILIPS). Both KBM and AFFILIPS are fully ISO 9000-ISO 14001 approved and offer the most complete range of master alloys for the metallurgical industry. Products for the aluminum industry include AlTiB, AlTiC, AlB, AlSr as well as a full range of hardeners, tablets and briquettes (a.o. Cr, Fe, Mn and Ti). The very complete product range for the copper industry includes products like CuB, CuCo, CuCr, CuFe, CuMg, CuSi, CuTi and CuZr. KBM AFFILIPS is also the right address for NiMg (and complex FeNiMg), additives for super alloy production as well as Pb and Zn master alloys.

Kempe International

#238

Geelong, Victoria, Australiawww.kempe.com.au

Kempe International is a leading service and equipment supplier providing turnkey facilities, specialized equipment, engineering consulting and maintenance support to the worldwide aluminium smelting industry. Kempe offers products and services in a variety of areas including potrooms, cast house, anode handling and cleaning, rodding shop, and materials handling and processing. Kempe has extensive experience in the smelting industry with clients in Australasia, Europe, India, Middle East, North America, South America and Southern Africa and is keen to work with new clients anywhere in the world. Kempe has permanent operations in Australia, Mozambique and the United Arab Emirates.

Laeis GmbH

#219

Wecker, Luxembourgwww.laeis-gmbh.com

Laeis is a leading supplier of machines and plants for the ceramics and refractory industries, the building materials industry, the carbon industry and others. The product range includes hydraulic high performance presses with pressing forces from 600 up to 4,200 tons, kilns and dryers with a temperature range up to 1 850 °C, automation and handling systems, high intensity hot mixers and grain heaters for batch sizes up to 2 000 l, and plant engineering. Laeis has developed a new concept for a paste preparation and anode pressing plant based on a hydraulic high performance press for a capacity of up to about 50 t/h in a single line.

Light Metal Age

#235

San Francisco, Californiawww.lightmetalage.com

For over 62 years, Light Metal Age has covered primary production and semifabrication of light metals, primary aluminum and associated nonferrous industries throughout the world. Circulation goes to smelters, rolling mills, extrusion plants, sheet rod and wire mills, foundries and die casting, anodizing, roll casting, coil coating and forging operations. Recipients are executives, general managers, plant managers, technicians, metallurgists, chemists and engineers responsible for fabrication, production and operations. Editorial topics covered in Light Metal Age include: extrusion process control, aluminum automotive applications, pot line technology, direct chill casting, secondary aluminum production, cast house metal quality, hard anodizing, and rolling mill technology.

L.P. Royer Inc.

#243

Lac-Drolet Quebec, Canadawww.lproyer.com

Since 1934, L.P. Royer has made and developed specialized safety footwear, even if it is for protection against molten metal infiltration, lineman, woodcutter or pruner, specialized chemical boots, for extreme cold or simply for a general use, available for man or woman. L.P. Royer Inc. has the solution to protect feet from injury. With the certification ISO 9001-2000, our products meet the Canadian (CSA), the American (ANSI) and the European (CE) standards. L.P. Royer Inc. is proud to supply potroom boots for all the aluminum companies in Canada and part of Alcoa's group in the United States. You can learn more about L.P. Royer Inc. in visiting our Web site at www.lproyer.com.

Master Alloys Co.

#234

Wabash, Indianawww.wabashalloys.com

Master Alloys will be exhibiting its popular 100% pre-weighed hardeners. The elements are packaged in moisture-proof containers. The product is unique in that it is 100% element in powder form, which increases the surface area insuring fast dissolution. Because it is 100%, it reduces inventory and is more economical than other forms of hardeners. Because of the unique packaging, the product is also easy to use, easy to store, has minimum metal contamination, minimum oxidation of melt and guaranteed composition. Master Alloys also supplies grain refiners and specialty alloys to the aluminum industry.

McAllister Mills/TRITEX LLC

#125

Independence, Virginiawww.mcallistermills.com

Come visit us at TMS 2006 in San Antonio. McAllister Mills has several new products we are introducing along with our standards. Our Maxsil CF6-2000 is the original Silica Fiber Needled Blanket, good for temperatures to over 2000°F. Maxsil CF6-2000 is shot free as well as one of the most durable blanket products on the market at high temperature. Other products of note are specialized oven/furnace door seals, coil pads, furnace curtains, filter bags and socks, gaskets, specialized trough cover, etc. Tritex LLC, our insulation division is introducing a new alternative to RCF/Ceramic Fiber. The new blanket product is suitable for temperatures to 1800°F, biosoluble, strong and easy to fabricate. The new blanket is available ¼"-1" thickness and a standard 9# density.

MECFOR Inc.

#425

Chicoutimi, Quebec, Canada

www.mecfor.com

MECFOR, a Canada-based corporation, designs, fabricates and supports specialized vehicles and process equipment for the primary and secondary aluminium industry worldwide. Our understanding of the aluminium production processes makes us an excellent turnkey project partner as we can actively and effectively participate in the determination of the best global equipment solution with our client. Our focus being the aluminium industry, all of our personnel clearly understand the harsh working environment of smelters, and our equipment is designed accordingly. We specialize in multifunctional casthouse vehicles, bath crucible handlers, anode and crucible haulers, underpot cleaning vehicles as well as anode grooving machines and other custom process equipment.

Mechatherm International Ltd.

#512

Kingswinford, West Midlands, United Kingdom

www.mechatherm.co.uk

Mechatherm, privately owned and formed in 1973, has developed a worldwide reputation specializing in furnaces for aluminium, copper and brass industries. The product range: aluminium foundry - melting and holding, rotary, scrap charging machines, vertical d.c. casting machines, turnkey foundry installations; aluminium extrusion - log heaters and shears, ageing ovens, automatic ageing oven basket handling systems and die ovens; aluminium heat treatment - air recirculated furnaces; aluminium dross reclamation - joint venture with Jesse Brough Metals, custom designed for the dross to be recycled - the full range of dross recycling plants include refining and separation into useable products and remelting of aluminium metallics; copper and brass extrusion - gas-fired billet heating furnaces, roller hearth and walking beam.

Metallurg Aluminium

#214

Rotherham, South Yorkshire, United Kingdom

www.MetallurgAl.com

Metallurg Aluminium combines the strengths of its members, London & Scandinavian Metallurgical Co. Limited (LSM), Shiel-dalloy Metallurgical Corporation (SMC) and Companhia Industrial Fluminense (CIF) to innovatively meet the highest quality requirements of the aluminium industry. With its three manufacturing facilities, in the UK, U.S. and Brazil, its professional worldwide sales force and distribution network, Metallurg Aluminium offers the aluminium industry the highest level of service in the supply of aluminium grain refiners, master alloys, hardeners, powders and rod feeding equipment.

Our range of compacted powder products includes chrome, copper, iron, manganese, nickel and titanium in our ALTAB™ products and briquettes - renowned for high and consistent elemental yields and ease of use.

Metallurgical Society of CIM

#543

Montreal, Canada

www.metsoc.org

The Metallurgical Society (MetSoc) of the Canadian Institute of Mining, Metallurgy and Petroleum, formed in 1967 under the umbrella of CIM, serves the needs of Canadian metallurgists working to transform ores to metals and other commercial products. MetSoc, 1,000 strong, provides a forum for engineers, scientists and technical personnel and students to exchange and share new knowledge. MetSoc also acts as a catalyst in enhancing the growth of members engaged in the minerals, metals and materials industry. To enhance the exchange of information, MetSoc publishes proceedings including: hydrometallurgy of nonferrous metals, light metals, pyrometallurgical operations, covering the smelting of sulphides and laterites, iron and steel developments, among others.

METTOP GmbH

#502

Leoben, Austria

www.mettop.com

MEXTRA Eng. Extrativa de Metais

#119

Jardim Inamar Diadema SP, Brazil

www.mextrametal.com.br

Producing ferro alloys and nonferrous metals, MEXTRA started its activities in 1978, as a result of the aspirations of a metallurgical engineer, Eduardo Barchese, who wanted to transform his doctoral thesis into an enterprise. Before long, MEXTRA reached an outstanding position in the market, producing metals and metal alloys which had never been produced in Brazil. Today, dynamic and aggressive management brings the company to expand its businesses, obtaining international recognition. With the production and grinding of metals, MEXTRA increased its product range and developed a line called Mextral Alloying Tablets. They are alloying tablets for aluminum, such as iron, chromium, manganese, copper and titanium which add excellent mechanical properties to aluminum. We have become well-known supplying aluminum manufacturers such as Alcan, Alcoa, CBA, Billiton, Aluvalle and others, with this line of products.



Mid-Mountain Materials Inc.

#433

Mercer Island, Washington
www.mid-mountain.com

Mid-Mountain Materials Inc., dedicated to the aluminum industry for 30 years, provides industrial textiles that enable the industry to move toward energy efficiency and environmental compliance. Our engineered sealing systems use our proprietary ARMATEX® QF refractory coated textiles. We custom design systems for reduction cells that aid in energy conservation, contain unwanted pollutants, and maximize pollution control equipment. In addition to our ARMATEX® coated fabrics, other thermal barrier products in our high performance textile and insulation product lines include: thermal insulation materials, engineered fabricated components, leached silica cloth, and refractory specialties for use in carbon bake and cast house areas for fuel efficiency, safety and maintenance.

Milward Alloys Inc.

#333

Lockport, New York
www.milward.com

Milward Alloys Inc. is a manufacturer of both copper- and aluminum-based master alloys. It produces a wide variety of grain refiners, hardeners, modifiers and degasifiers for the nonferrous industry in the form of rod, waffle, ingot, shot, cut-cast and Acu-Stix. Several unique alloys are available such as 1% and 5% beryllium aluminum, 10% and 15% strontium aluminum, and 8% and 15% phosphorus copper. Milward Alloys also possesses unique capabilities to manufacture specialty alloys upon request. We invite you to stop at our booth (#333) to discuss your special needs.

MINTEQ International Inc.

#130

Slippery Rock, Pennsylvania
www.mineralstech.com

MINTEQ International Inc. is one of the world's largest producers of monolithic and specialty refractory lining systems for the steel, aluminum, cement, glass and power generation industries. MINTEQ is a resource- and technology-based company with manufacturing, and research and development, facilities around the globe. An industry leader at developing and introducing new and innovative technologies to the aluminum industry, MINTEQ's OPTISHOT™ AL and FAST FIRE™ AL shotcrete castable lining systems provide aluminum producers with the most durable refractory maintenance lining systems in the marketplace. The OPTISHOT™ AL and FAST FIRE™ AL lining systems also provide the fastest refractory installation method to rebuild and construct complete new furnaces without extensive engineering, complicated placement techniques and extensive lead times.

Murlin Chemical Inc.

#334

West Conshohocken, Pennsylvania
www.murlinchemical.com

Aluminum grade natural bone ash, natural bone ash and synthetic bone ash are manufactured at the Murlin chemical plant in West Conshohocken, Pennsylvania. All these products are accepted worldwide in the nonferrous metals industries as the very best mold release agents. Bone ash provides a consistent barrier against attack by molten metal when applied to a mold, a refractory trough, a surface, a dross bin, a ladle, or a tool that will be exposed to molten nonferrous metal. Bone ash also protects as a thermal insulator. Bone ash can be applied as the dry powder or as an aqueous slurry. Any method for coating the surface can be used. Plan to visit booth #334 to learn about advantages gained using Murlin bone ash.

Nalco Company

#208

Naperville, Illinois
www.nalco.com

Nalco Company is the world's largest water, and process chemicals and services provider to industrial end markets. We serve companies across a broad spectrum of industries and offer a wide range of programs to help customers improve their efficiency and productivity in an environmentally responsible manner. Our products and services focus is on improving overall plant economics, optimizing equipment efficiency, addressing compliance issues and increasing operator capabilities and effectiveness. To ensure that our approach to your business is comprehensive, we carefully monitor interactions between the mechanical, operational and chemical aspects of your system. From mine to metals, Nalco is your total solution provider.

National Filter Media

#534

Salt Lake City, Utah
www.nfm-filter.com

In 100 years, National Filter Media has become one of the world's largest filter media companies. NFM makes filtration products for vacuum filters, pressure filters and dust collectors. NFM also provides OEM filter replacement parts and consulting services. Our filter frames for the alumina industry have become the industry standard by dramatically increasing flow on the press floor. NFM has also developed new fabrics that are increasing filter life by 150%. Today's metals market is expanding and changing. Companies must get maximum output while maintaining quality. NFM's experts work to help their customers take advantage of today's newest technologies.

NKM Noell Special Cranes GmbH

#327

Wurzburg, Germany

www.nkm.com

NKM Noell is a leading supplier of cranes and special equipment to the aluminium industry for reduction, carbon and rodding. Supply covers the complete engineering, detail design, manufacturing, start-up and commissioning for individual equipment and turnkey projects: aluminium reduction - pot tending cranes, anode jacking frames, transfer gantry systems, cathode crane, crucible heaters, crucible and pipe cleaning machines, anode clamps; aluminium carbon - furnace tending cranes, flue wall brushing and straightening machines, anode stacker cranes; aluminium rodding - green and baked anode handling, casting and mating stations, stem and pin monitoring, stem brushing and repair, butt precleaning and stripper, butt handling/treatment, bath handling/treatment, loading/unloading station

North American Manufacturing Company Ltd.

#317

Cleveland, Ohio

www.namfg.com

Also find us on page 18 of JOM!

North American Manufacturing is a solution provider for combustion and process control systems. The company produces and sells combustion hardware as well as complete systems including installation drawings and complete control systems. North American has been providing systems for the aluminum industry for better than 40 years, specializing in energy savings, emissions reduction and melt rate optimization.

Novelis PAE

#301

Voreppe, France

www.pae.novelis.com

Novelis PAE is recognized as an expert by aluminium professionals. This company supplies equipment and technical assistance for continuous strip casting, in-line molten metal treatment, automatic slab casting and associated spare parts and consumables. Numerous cast houses have already placed their trust in its technology. From the engineering studies at the start of your project through successful completion including construction, supervision of installation, start-up and staff training, you will benefit from Novelis PAE's experience and professionalism.

Opsis

#133

San Marcos, California

www.opsis.se

Opsis Inc. is the North American supplier of open path monitoring systems for air quality monitoring, continuous emissions monitoring (CEM) and process control. The ultraviolet DOAS technology, developed by Opsis, has received international approvals and provides customers with system solutions for several applications. All systems feature dynamic calibration capability and simple hardware configurations. The ambient system is an EPA approved equivalent method for SO₂, NO₂ and O₃. Other Opsis benefits include DOAS system packages, automatic monitoring systems, multigas and multipath systems, fast and continuous measurements, modular construction and simple report generations. Opsis equipment applications include trend monitoring, street level air quality monitoring, and fugitive emissions fence line monitoring among many others.

Outokumpu Technology Ltd.

#225

Burlington, Ontario, Canada

www.outokumputechnology.com

***Also find us on the
inside front cover of JOM!***

In 2001 Outokumpu, a leading global metals and technology group, expanded its offerings to the alumina and aluminum industries. Outokumpu Technology specializes in the design, engineering and delivery of alumina calcining plants (Lurgi Metallurgie), paste plants (KHD Aluminium Technology), rodding shops (Aisco and KHD Aluminium Technology) and casting machines (Aisco). Outokumpu's long term commitment to the metals industries, combined with the technologies of these three reputed suppliers, positions Outokumpu Technology to be the technology and service partner of choice for the aluminum industry. E-mail: aluminum.technology@outokumpu.com

Parker Hannifin

#432

Ulricehamn, Sweden/Wadsworth, Ohio

www.parker.com

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 30 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.

PCM/Image-Tek

#128

Springfield, Vermontwww.pcmanufacturing.com

Innovative barcoding for the metals industry...PCM/Image-Tek is a leader in harsh environment barcode identification solutions. As experts in the extreme, we are pleased to introduce the unique ability to provide a complete application solution for your high temperature production management requirements. Ultra high temperatures, solvent and chemical resistant, oily surfaces, abrasion resistant and weather resistant--we can provide the labels that survive, from raw material receipt to shipping. We provide the labels that need to survive. Please call our knowledgeable staff at (802) 885-6208 ext. 300 so that we can provide you with the engineered solutions for any of your extraordinary applications.

PERI/PHYSICA

#341

Salt Lake City, Utahwww.processeng.com

Also find us on page 17 of JOM!

Process Engineering Resources offers leading edge simulation tools and software, including computational modeling of the most challenging multi-physics engineering processes and thermochemical modeling. PHYSICA+ is new generation software for computational modeling of multi-physics phenomena in a unified environment. Multi-physics simulation essentially involves interaction amongst continuum phenomena (e.g., fluid-structure interaction, magneto-hydrodynamics with heat transfer and solidification/melting, heat transfer-material defects, aero-acoustics). PHYSICA+ features multi-physics simulation technology (electromagnetics, acoustics); Navier-Stokes flows, heat transfer, phase changes, structures; one-way, two-way or fully coupled physics; open software architecture (parallel); competitive cost.

Plibrico Inc.

#228

Chicago, Illinoiswww.plibrico-usa.com

Plibrico Company celebrates its 90th year as an American owned and operated manufacturer and installer of monolithic refractories. Plibrico's product line is composed of a wide range of plastics, castables and maintenance materials that can be installed through various methods, such as our patented HyRate and mini-HyRate plastic gunning, pumping, Plishot, gunning, etc. Stop by our booth to discuss how Plibrico's experience and "state-of-the-art" consistent products, along with your local area representative, can successfully solve your refractory problems in a timely fashion.

**Precimeter Controls AB/Sentech
Precimeter Inc.**

#114

Gothenberg, Swedenwww.precimeter.com

Precimeter delivers level control systems for automating the casting process in aluminium foundries. These systems can be used in a variety of applications such as level control for mold and head-box, level control for trough and launder, and furnace level control. Precimeter's laser sensor system guards the quality of the casting and the purity of the alloy at every stage from smelting to final pouring. The sensor and actuator combination form a complete control system; no external equipment is needed. Precimeter sensors are delivered with a PI-controller built into the sensors or directly connected to your existing system.

Pyrotek Inc.

#201

Spokane, Washingtonwww.pyrotek.info

From concept to casting, Pyrotek partners with you to improve process performance through enhanced melt quality and metal processing. Pyrotek's technical experts are experienced in every aspect of aluminium production, from primary and secondary smelting, to holding, degassing, filtration and casting. Pyrotek's Metallurgy and EMP Technologies divisions provide products and services that improve productivity, reduce energy consumption, increase metal recovery and improve product quality. As your supply partner, Pyrotek helps you utilize advancements in technologies and products to better your bottom line. Visit Pyrotek at TMS to discuss how Pyrotek's solutions can improve your aluminium process.

Rex Materials Inc.

#129

Fowlerville, Michiganwww.rexmaterials.com

Rex Materials has emerged as a world leader in helping our customers solve their heat containment problems. We specialize in developing and delivering products that solve specific customer needs utilizing our custom engineered high temperature material systems and refractory products. Our materials include Pyrolite® ceramic fiber, FUSIO2N™ fused silica and Pyroform™ refractory. Rex Materials has two manufacturing facilities along with a separate design, tooling and prototype center. We have a team of engineers, designers and material scientists ready to help you solve your heat dilemma. From high temperature insulation to molten metal handling systems to specialty heaters, we deliver solutions.

RHI AG

#615
Leoben, Austria
www.rhi-ag.com

The RHI Non Ferrous Metals Engineering GmbH - a subsidiary of the RHI Group - is an integral part of RHI Refractories and has been established in the fields of nonferrous metals as the competence center for systems and process solutions, which bear customer-added values and are going far beyond refractories. Refractories is the core business of the RHI Group. Under the RHI Refractories brand, products, system solutions and services are delivered to over 10,000 customers in more than 180 countries on all continents. As the global market and technology leader, RHI Refractories has an optimized worldwide network of production, sales and services.

Riedhammer GmbH

#527
Nuremberg, Germany
www.riedhammer.de

Since 1925, Riedhammer GmbH has specialized in the design and construction of high productive, state-of-the-art ring pit furnaces for baking of high quality anodes and cathodes for the aluminum industry, as well as electrodes for the steel industry. More than 105 furnaces, in 25 different countries, have been built or modernized based on this concept. Riedhammer also supplies the pertinent equipment for the aforesaid furnaces like Auto Firing System for a wide range of fuels, waste gas treatment systems, tending cranes and conveyors, and provides outstanding product quality, maximum fuel efficiency, reliability and world-class environmental friendliness in an affordable way.

SELEE Corporation

#100
Hendersonville, North Carolina
www.selee.com

SELEE Corporation, born as a division of an international aluminum company, introduced ceramic foam filters of SELEE structure as a medium for filtering molten aluminum in the 1970s. SELEE immediately established a reputation as the world leader in aluminum melt treatment and filtration technology and for ceramic material development and innovation. SELEE Corporation is dedicated to new product development, continuous improvement and innovation, always building on its strong background in the aluminum industry. In the aluminum industry, SELEE is key to achieving the highest levels of metal cleanliness and quality. SELEE is the only supplier of molten metal handling and treatment products in the world that is certified to ISO 9001 and ISO 14001 standards.

SETARAM Engineering

#317
Caluire, France
www.setaram

For more than 30 years, SETARAM has been producing anode baking furnace firing and regulating systems for the aluminium industry. The SETARAM Firing Systems are available for any type of ring furnace (open or closed type) and for any type of fuel (light or heavy fuel oil, natural gas, coal gas or LPG). SETARAM proposes a complete hardware and software package to control and monitor the whole anode baking process through the following functions: central regulation, real time supervision and data management. The heating programming and regulating techniques are operating in aluminium plants all over the world. Dedicated to constantly improving our technology, SETARAM Firing Systems set the standards for the industry.

Skarveland AS

#405
Sunde, Norway
www.skarveland.no

At TMS 2006, Skarveland AS will present new equipment and systems for the aluminium industry for improved environment, efficiency and economy. For potrooms: a new technology for total recycling of spent potlining material and a build, own and operate (B.O.O.) workshop for such operation. Skarveland will present B.O.O. workshops for repair of anode rods and potshells. Skarveland will also present a new technology for maintenance and cleaning of conveying pipes in dense phase systems for transport of secondary alumina. We welcome you to visit our booths (#401-409) at the ALTECH Pavilion at TMS 2006 in San Antonio.

SMV AS

#403
Norway
www.smv.as

At TMS 2006, SMV AS will present new equipment and systems for the aluminium industry for improved environment, efficiency and economy. For potrooms: special crushers and cooling lines for hot grabbed bath from the cells; special vehicles for transport of anode pallets, metal crucibles and potshells; vacuum cleaners, cell service wagons, spike removal machines, cell cavity cleaners, cell feeders, anode changers, etc. For cathode service shops: semiautomatic potlining machines. For cast house: PPM-purification of potroom metal by automatic skimmers and metal purification stations. We welcome you to visit our booths (#401-409) at the ALTECH Pavilion at TMS 2006 in San Antonio.



Solios Group

#307

Solios Carbone*Givors, France*www.solios-carbone.com

Solios Carbone is a leader in turnkey plants, process and proprietary equipment in the primary aluminium industry, for green anode plants, bath processing, carbon butts processing and pitch processing. Solios Carbone offers a leadership based on industrial engineering and process know-how and has also developed a wide range of proprietary equipment for dry material preparation, paste preparation, anode forming and treatment of waste. The latest generation of green anode plants is based on the SCAP RHODAX® technology and the intensive mixing/cooling cascade.

Solios Environnement SA**Solios Environnement Inc.****St. Germain en Laye, France***Montreal, Quebec, Canada*www.solios-environnement.com

Solios Environnement designs, builds and installs dedusting units and fume or gas treatment plants thanks to a complete range of proprietary equipment. Solios Environnement is well-known for providing high quality equipment based on reliability and easy maintenance. Each process is an integrated part of the aluminium production and does not produce any waste. In gas treatment centers, Solios Environnement offers dual suction systems to double pot ventilation during anode change providing significant reduction in potroom roof emission.

Solios Thermal*Wombourne, Wolverhampton, England*www.solios-thermal.com

Solios Thermal is a world class contractor in the design, supply and installation of thermal processing equipment both for the primary and the secondary aluminium industries. Solios Thermal is specialized in the supply of equipment for the melting and processing of aluminium in cast house furnaces, melting and holding furnaces, heat treatment furnaces and recycling equipment with associated control systems. Solios Thermal has developed a rotary kiln-based thermal delacquering/drying system known as the IDEX®. Solios Thermal also has a metal movement system, EMIX+®, which is capable of both stirring the molten metal and transferring the metal from the melting to holding furnace.

Springer

#127

New York, New Yorkwww.springer.com

Welcome to the new Springer! Since the merger of Kluwer Academic Publishers and Springer-Verlag in 2004, Springer is one of the most renowned scientific publishing companies in the world. Under the new brand, "Springer," the worldwide publishing houses produce more than 3,500 new books and 1,250 journals each year. Our publications include top-quality journals, essential reference works, authoritative monographs and textbooks. As ever, we are committed to open communication and collaboration. Whether you are an established author or a promising newcomer, proposals, comments and ideas are always welcome.

STAS

#109

Chicoutimi, Quebec, Canadawww.stas-unigec.com

STAS, based in Québec, Canada, continues to develop degassers, filters and flux injectors for the aluminium industry following 25 years of successful applications in more than 30 countries worldwide. STAS is well-known for its automated equipment used in metal treatment for both primary and secondary plants. For example, there continues to be a need to reduce alkalines in crucibles (TAC), to remove hydrogen and inclusions from molten metal in casting centres, with or without chlorine. Available from STAS are automated hot and cold crucible cleaning machines, and automated siphon tube cleaners, and a new development is to automate anode handling in the potroom.

Stellar Materials Inc.

#124

Tarpon Springs, Floridawww.stellarmaterials.com

Visit Stellar Materials online at www.stellarmaterials.com.

Techmo Car s.p.a

#220

Limena, Padova, Italywww.techmo.it

Over the last 41 years, Techmo has been devoted to the solution of technical problems connected with the aluminium industry. Among the most significant machines produced by Techmo are anode changers, tapping trucks, feeder vehicles, crust breakers, a wide range of heavy duty transporters and the most up-to-date furnace tending vehicles. Techmo is also supplying to aluminium company fixed plants, such as anode butts cleaning stations and ladle cleaning stations, taylor-made equipment and a wide range of services. All of Techmo's products and services propose new, environmentally friendly and cost-effective solutions to aluminium producers.

Thermal Ceramics

#400

Augusta, Georgia

www.thermalceramics.com

Thermal Ceramics, a worldwide leader in refractory and high temperature insulation technology, offers solutions for the most demanding thermal management challenges. Our products for the aluminum industry include Superwool® 607® and Superwool 607® MAX®; Tri-Mor®Albond®, Alcast®, Kaocrete® and Kaolite® Castables; K® and JM™ Insulating Firebrick and Mortars; TR-19®/TR-20® Structural Board Insulation; Kaowool® Blanket/Strip/Bulk Ceramic Fibers; Kaowool® and Vacuum Formed Boards and Shapes; BTU-Block™ Microporous Insulation; Kaowool® Paper and Felts; Pyro-Bloc® Weld-On and Veneering Modules.

Thermcon Ovens B.V.

#315

Geldermalsen, The Netherlands

www.thermcon.com

Thermcon Ovens B.V., a member of the Otto Junker Group of companies, is a supplier of the complete state-of-the-art cast house package for the production of aluminium extrusion billets, rolling slabs and foundry ingot. The delivery program for the cast house comprises: charging machines, skimming machines, melting and holding furnaces, launders, casting machines, homogenizing furnaces and billet sawing systems. Recycling furnaces for contaminated aluminium scrap are also available. Thermcon Ovens B.V., together with other members of the Otto Junker Group, supply pusher furnaces, heat treatment plants for aluminium strip, etc., and Elhaus equipment for around the extrusion press. Unique one-stop shopping is available to the aluminium industry.

Thermo-Calc Software

#446

Stockholm, Sweden

www.thermocalc.com

Also find us on the back cover of JOM!

Thermo-Calc Software is a well-established supplier of thermodynamic calculations and kinetic simulations software. Among our many products you may find Thermo-Calc Classic (TCC) software for thermodynamic calculations in multi-component materials. It is also available with a Graphical User Interface (TCW) that makes this software easy to learn and operate. The software may be applied to different types of materials: various steels, Ni-base superalloys, Al-, Cu-, Ti- and Mg-alloys, nuclear materials, minerals, slag systems, salts, ceramic systems, semi/super-conductors and aqueous solutions. Calculations involve phase diagram calculations, calculation of various thermochemical properties-activities and enthalpies--calculation of Pourbaix diagrams, solidification paths, etc.

Thermo Electron Corporation

NITON Analyzers Group

#247

Billerica, Massachusetts

www.thermo.com/niton

Thermo Electron Corporation's NITON Analyzers unit is internationally recognized as the world's leading manufacturer of portable nondestructive alloy analysis instrumentation. Thermo NITON XRF alloy analyzers are ideal tools for QA/QC of alloy materials, NIST's traceable validation and positive material identification (PMI) of machined or fabricated components in various manufacturing industries. With the press of a trigger, the NITON analyzer provides positive grade identification and composition analysis of materials ranging from aluminum alloys to stainless steels, nickel-based alloys, titanium alloys and more in seconds. Since XRF technology is completely nondestructive, the analysis can be performed without concern on finished and installed components and raw materials. The NITON Analyzers unit is headquartered in Billerica, Massachusetts; with facilities in Bend, Oregon; Munich, Germany; Hong Kong; and Shanghai, China and sales and service centers throughout the world.

U.S. Dept. of Energy/Office of Energy Efficiency and Renewable Energy

#121

Washington, DC

www.eere.energy.gov/industry

The U.S. Department of Energy Office of Energy Efficiency and Renewable Energy's Industrial Technologies Program (DOE-ITP) has formed partnerships with the most energy intensive U.S. manufacturing industries to accelerate the development of energy efficient technologies and processes. DOE-ITP R&D projects with these industries will be highlighted. These partnerships support and enhance the global competitiveness and ecological sustainability of U.S. industry through strategic, leveraged investments in technologies that save energy, improve productivity and reduce waste.

VEXTEC Corporation

#540

Brentwood, Tennessee

www.vextec.com

VEXTEC Corporation (Nashville, Tennessee) offers computational material science software integrated within the finite element design environment. VPS-MICRO™ (fatigue) simulates real-world grain variability in large, geometrically complex products down to nanoscale devices. Using "smart" processing, all material grains that make up the product are simulated and virtually assessed for crack initiation and growth as a function of use. MICRO can be used for engineering life extension trade studies, material change-outs, manufacturing process sensitivity analysis, spare parts forecasting and/or warranty cash-flow projections. MICRO has impacted products of the future including aerospace turbine engines, industrial turbines, automobiles, ship structures and electronic devices.



W

Wagstaff Inc.

#101

Spokane, Washington

www.wagstaff.com

***Also find us on the inside back cover
of JOM!***

Since 1946, customers with exacting quality standards have turned to Wagstaff for aluminum solidification technology. Today, with customers in more than 52 countries, Wagstaff has earned international recognition as the aluminum industry's leader in direct chill casting equipment. For more details on Wagstaff, visit our booth (#101), contact us at info@wagstaff.com or visit www.wagstaff.com

ZIRCAR Ceramics Inc.

#511

Florida, New York

www.zircarceramics.com

ZIRCAR Ceramics Inc. is a manufacturing and international marketer of a wide range of casthouse consumables which include: castertips and nozzles for twin roll and belt continuous casters; ceramic foam and fiberglass cloth filters; vacuum-formed ceramic fiber and non-RCF fiber shapes; ceramic fiber textiles - rope, tape, cloth; ceramic fiber and non-RCF paper and blankets; precision CNC machined and precast refractory baffles, floats, dams; microporous insulation fabricator. Phone: (845) 651-6600; Fax: (845) 651-0441; E-mail: sales@zircarceramics.com