

# TMS 2001

130<sup>TH</sup> ANNUAL INTERNATIONAL MEETING & EXHIBITION



Previewing products and services for over 160 companies participating in the TMS 2001 Annual Meeting Exhibition

#### Featuring:

- A Product & Services Index
- Individual Company Profiles
- Exhibition Floorplan
- Alphabetical Listings of Exhibitors



View complete meeting and exhibition details, as well as current exhibitor information in TMS OnLine at:  
<http://www.tms.org/Meetings/Annual-01/AnnMtg01Home.html>

# Exhibition Show

# Directory

# TMS 2001 ANNUAL MEETING EXHIBITION PRODUCT/SERVICE INDEX

Refer to this convenient index to locate companies supplying the products and services you are looking for:

## **AIR POLLUTION CONTROL EQUIPMENT**

BHA Group Inc.  
Danieli Corus  
Moltech  
OPSIS Inc.  
Procedair Industries

## **ALUMINUM INDUSTRY WEAR PARTS**

Saint Gobain Ceramics & Plastics Inc  
Thermal Systems America

## **ALUMINUM PROCESSORS**

Christy Refractories  
Danieli Corus  
Hodges Group, Inc.  
Loma Machine Mfg

## **ALUMINUM PRODUCTION TECHNOLOGY & EQUIPMENT**

ABB Industrie AG  
Advanced Dynamics Corp Ltd  
Aisco Systems Inc.  
Almeq Norway AS  
Altech  
B & P Process Equipment & System LLC  
Bricmont Inc  
Canadian Overhead Handling Inc.  
Eirich Machines Inc.  
Fosbel Inc  
Glama Maschinenbau GmbH  
Hencon B.V.  
Hodges Group, Inc  
Holcan Constructions  
Holton Conform  
Jayne Industries  
Jervis W. Webb Co  
Johnston-Vermette  
Kempe International  
Keops Technologies Inc  
Kvaerner Process Technology  
LMI Selcom  
LOI, Inc. Industrial Furnaces  
Loma Machine Mfg  
Megaquip Industries Ltd  
Moeller Electric GmbH  
Moltech  
Murlin Chemical Inc.  
Noell Crane & Service Inc.  
Pechiney  
Precision, Inc.  
Pyrotek Inc  
Rex Roto Corp  
Sentech Corporation  
Sermas Industrie  
SETARAM

Silver Needle  
STAS Ltd  
Stein Atkinson Stordy Ltd  
Techmo Car & Engineering  
Thermal Systems America  
Thermcon Ovens BV  
UES Software Inc.  
VAW Aluminium-Technologie GmbH  
Vulcan Refractories Ltd  
Wagstaff Inc.  
Wienalco  
Zircar Ceramics Inc

## **ALUMINUM QUALITY**

ABB Bomem Inc.  
Altech  
Cambridge Scientific Abstracts  
MagChem Inc.  
Nalco Chemical Co  
Precimeter, Inc.

## **ALUMINUM REFINING SYSTEMS**

Aisco Systems Inc.  
Asbury Fluxmaster  
Hodges Group, Inc.  
Hydro Aluminium Hycast  
Lem High Current Systems  
Master Alloys Co.  
Noell Crane & Service Inc  
Pyrotek Inc  
STAS Ltd

## **ANODE:**

### **ASSEMBLY**

Almeq Norway AS  
Altech  
Erico  
GNA Industrial Furnaces Inc.  
Jervis B. Webb Company  
Kempe International  
KHD Humboldt Wedag  
Precision, Inc.  
Schart Westfalia GmbH  
SETARAM  
Sermas Industrie

### **CLEANING**

KHD Humboldt Wedag  
Scharf Westfalia GmbH  
Techmo Car S.p.A.

### **ROD STUB WELDING**

Altech  
Erico  
Holcan Constructions Pty. Ltd.  
Precision, Inc.

## **TRANSPORTATION**

Scharf Westfalia GmbH  
Techmo Car S.p.A.

## **AUTOMATION/COMPUTER SIMULATION**

Advanced Dynamics Corp  
AISCO Systems Inc  
Alusuisse Alesa Ltd.  
Applied Research Laboratories  
Bricmont, Inc.  
Hamilton Research & Technology  
Hatch Kaiser  
Jervis B. Webb Company  
Keops Technologies Inc  
LMI Selcom  
LOI, Inc. Industrial Furnaces  
Loma Machine Mfg., Co., Inc.  
LVE Verfahrenselektronik GmbH  
Moeller GmbH  
Sentech Corporation  
STAS  
Thermcon Ovens BV  
UES Software Inc.  
VAW Aluminium-Technologie GmbH

## **BORON NITRIDE COATINGS**

Asbury Fluxmaster of Utah  
Milward Alloys  
Rex Roto Corp  
ZYP Coatings Inc.

## **BUTT:**

### **CRUSHING**

Techmo Car S.p.A.  
KHD Humboldt Wedag  
Scharf Westfalia GmbH

### **STRIPPING**

KHD Humboldt Wedag  
Scharf Westfalia GmbH

## **CARBON:**

### **PASTE PRODUCTION & EQUIPMENT**

B&P Process Equipment and Systems  
Eirich Machines Inc  
FCB  
KHD Humboldt Wedag  
Kvaerner Process Technology  
Pechiney  
Procedair  
Vesuvius  
Wienalco

## **CATHODE REFINING**

Sermas Industrie  
Vesuvius

## **TECHNOLOGY AND SUPPLIES**

ABB Industrie AG  
Alusuisse Alesa Ltd.  
FCB Aluminum  
Jervis B. Webb Company  
Johnston-Vermette  
Kvaerner Process Technology  
GNA Industrial Furnaces Inc.  
Innovatherm Company  
LVE Verfahrenselektronik GmbH  
R & D Carbon Ltd.  
SETARAM  
VAW Aluminium Technologie GmbH  
Wienalco

## **CASTING**

Advanced Dynamics Corp. Ltd.  
Aisco Systems Inc.  
Alan Worswick (Eng.) Ltd.  
Albany Research Ctr/US Dept of Energy  
Almeq Norway AS  
Asbury Fluxmaster  
Canadian Overhead Handling Inc  
Holton Conform  
Hydro Aluminium Hycast  
Johnston-Vermette  
Kabert Industries  
Loma Machine Mfg  
LVE Verfahrenselektronik GmbH  
MAGChem Inc.  
maerz-gautschi Industrial Furnaces  
Mechatherm International Ltd.  
Murlin Chemical Inc  
Pechiney  
RHI Refractories America  
VAW Aluminium-Technologie GmbH  
Wagstaff Inc  
Zircar Ceramics Inc  
ZYP Coatings

## **CEMENT**

ABB Industrie AG  
Bruker AXS  
Molten Metal Equipment Innovations Inc.  
Pryor Giggey Co

## **CHEMICALS AND ADDITIVES**

Asbury Fluxmaster  
Betz Dearborn  
Lem High Current Systems  
MagChem Inc.  
Master Alloys  
Metallurg Aluminium  
Murlin Chemical Inc  
Nalco Chemical Company

## **CLEANING SYSTEMS**

MagChem Inc.

## **CLOTHING – PROTECTIVE**

Pyrotek Inc  
Silver Needle Inc

## **COMBUSTION TECHNOLOGY**

Bloom Engineering Co., Inc.  
Bricmont, Inc.  
Erico Products Inc  
Hauck Mfg Co  
Hotwork  
maerz-gautschi Industrial Furnaces  
North American Manufacturing  
Thermcon Ovens BV

## **COMPUTER SOFTWARE**

Hamilton Research & Technology Ltd  
Hatch Kaiser  
LOI, Inc. Industrial Furnaces  
LVE Verfahrenselektronik GmbH  
SciDoc Inc  
SETARAM  
UES Software Inc

## **CORROSION/SURFACE TREATMENT**

Betz Dearborn  
Nalco Chemical Company  
Zircar Ceramics Inc

## **CRANES**

Canadian Overhead Handling  
NKM  
Noell Crane & Service  
Wienalco

## **DEGASSING**

Asbury Fluxmaster  
Blasch Precision Ceramics  
Graphite Equipment Mfg Inc  
Hydro Aluminium Hycast  
Mechatherm International Ltd.  
Metallics Systems  
Molten Metal Equipment Innovations Inc.  
PcO Raadts  
Pechiney  
Pyrotek Inc  
Saint-Gobain Ceramics & Plastics, Inc  
SELEE Corporation  
STAS

## **DROSS:**

### **HANDLING EQUIPMENT**

Alan Worswick Engineering Ltd  
Almeq Norway AS  
Altek International  
Alu-Cut International Inc.  
Brochot SA  
Fonderie Saguenay  
Glama Maschinenbau  
Mechatherm International Inc.  
Plibrico Company  
Precision, Inc.  
Pyrotek Inc

Sermas Industrie  
STAS

## **COOLING**

Alu-Cut International Inc.  
STAS

## **PROCESSING**

Altek International  
Kempe International  
Mechatherm Intl Ltd  
Precision Inc

## **REMOVAL**

Alu-Cut International Inc.

## **ENGINEERING AND CONSULTING SERVICES**

Advanced Dynamics Corp. Ltd.  
Aisco Systems Inc.  
Almeq Norway a/s  
Altech  
Alusuisse Alesa Ltd.  
Bricmont, Inc.  
Danieli Corus Canada Inc  
Erico  
FCB Aluminum  
Fonderie Saguenay  
Graphite Equipment Mfg Inc  
Hatch Kaiser  
Hencon B.V.  
Jervis B. Webb Company  
Johnston-Vermette  
Loma Machine Mfg  
maerz-gautschi Industrial Furnaces  
Moeller Electric GmbH  
Nalco Chemical Co  
PcO Raadts  
R & D Carbon Ltd.  
Rex Roto Corp  
Scharf Westfalia Industrial Systems GmbH  
SciDoc Inc  
STAS  
Techmo Car S.p.A.  
Thermcon Ovens BV  
UES Software Inc  
VAW Aluminium-Technologie GmbH  
Wagstaff Inc.

## **FILTRATION**

BDH Industries  
BHA Group Inc  
Christy Refractories  
Graphite Equipment Mfg Inc  
Kabert  
McAllister Mills, Inc.  
Metallics Systems Co L.P.  
Pechiney  
Pyrotek Inc  
Rex Roto Corp  
SELEE Corporation  
STAS  
US Filter  
Vesuvius

## **FURNACES**

Albany Research Ctr/US Dept of Energy  
Alu-Cut International Inc.  
Bricmont, Inc.  
Erico  
Fosbel Inc  
Gillespie & Powers, Inc.  
GNA Industrial Furnaces Inc.  
Hatch Kaiser  
Hodges Group, Inc.  
Jayne Industries  
LOI, Inc. Industrial Furnaces  
Louis A. Grant Inc.  
maerz-gautschi Industrial Furnaces  
Mechatherm International Inc.  
Plibrico Co  
Seco/Warwick  
SETARAM  
Stein Atkinson Stordy Ltd  
Thermcon Ovens BV  
Thorpe Technologies  
Zircar Ceramics Inc

## **GRAPHITE PARTS**

Graphite Engineering & Sales  
Graphite Equipment Mfg Inc  
Metallics Systems Co L.P.  
Molten Metal Equipment Innovations Inc.  
Pyrotek Inc  
Sermas Industrie  
Superior Graphite

## **GRAIN REFINERS HARDENERS**

Aleatur  
KBM Affilips B.V.  
Holton Conform  
KB Alloys Inc  
Master Alloys  
Milward Alloys  
Metallurg Aluminium

## **HF MEASUREMENT SYSTEMS – POT ROOMS/STACKS**

OP SIS Inc.  
STAS

## **INDUSTRIAL GASES**

Johnston-Vermette  
Opsis Inc.  
Pc+O M Raadts  
Seco/Warwick

## **INGOT & SOW CASTING HANDLING & STACKING**

Advanced Dynamics Corp Ltd  
Alan Worswick (Engineering) Ltd  
Alu-Cut International Inc.  
Canadian Overhead Handling Inc  
Jervis B Webb Co  
Johnston-Vermette  
LOI, Inc. Industrial Furnaces  
maerz-gautschi Industrial Furnaces

Megaquip Industries Ltd  
Sermas Industrie  
Thermcon Ovens B.V.  
Wagstaff Inc.

## **INSTRUMENTATION**

ABB Bomem Inc.  
Applied Research Laboratory  
Bruker AXS  
Hamilton Research & Technology Ltd  
Heraeus Electro-Nite Co  
maerz-gautschi Industrial Furnaces  
LMI Selcom  
LOI, Inc. Industrial Furnaces  
Precimeter, Inc.  
R&D Carbon  
Sentech Corporation  
SETARAM  
Thermcon Ovens B.V.

## **LUBRICANTS**

KB Alloys  
MagChem Inc.  
Master Alloys  
Metallurg Aluminium  
Pyrotek Inc  
ZYP Coatings

## **MASTER ALLOYS**

Aleatur  
Asbury Fluxmaster  
Holton Conform  
KB Alloys Inc  
KBM Affilips B.V.  
London & Scandanavian  
Master Alloys Co  
Metallurg Aluminium  
Milward Alloys Inc.  
Pyrotek Inc.

## **MATERIAL HANDLING**

Advanced Dynamics Corp. Ltd  
Aisco Systems Inc.  
Alan Worswick (Eng.) Ltd.  
Almeq Norway a/s  
Alu-Cut International Inc.  
Alusuisse Alesa Ltd.  
BHA Group  
Canadian Overhead Handling Inc  
FCB  
Glama Maschinenbau GmbH  
GNA Industrial Furnaces Inc.  
Jervis B. Webb  
Kempe International  
Loma Machine Mfg., Co., Inc.  
Megaquip Industries Ltd  
Murlin Chemical Inc  
NKM  
Noell Crane & Service  
Precision Inc  
Scharf Westfalia Industrial Systems GmbH  
Sermas Industrie

Techmo Car S.p.A.  
Thermcon Ovens BV  
Wienalco

## **MATERIAL INFORMATION**

CSM International  
Metallurgical Society of CIM

## **MEASUREMENT/TESTING AND ANALYSIS**

ABB Bomem Inc.  
Applied Research Laboratory  
Heraeus Electro-Nite  
LMI Selcom  
Niton Corporation  
Precimeter, Inc.  
R & D Carbon Ltd.  
Radiometrie Corp.  
Sentech Corporation

## **MOLTEN METAL PUMPS**

Alu-Cut International Inc.  
Christy Refractories  
Graphite Equipment Mfg  
Metallics Systems Co L.P.  
Molten Metal Equipment Innovations Inc.  
Pyrotek Inc  
Stein Atkinson Stordy Ltd  
STAS

## **PORT AUTHORITY**

Port of Longview

## **PROCESS EQUIPMENT**

ABB Industrie AG  
Alu-Cut International  
B&P Process Equipment & Systems  
Eirich Machines Inc.  
Hamilton Research & Technology Ltd  
Hatch Kaiser  
Hencon BV  
Holton Conform  
Jayne Industries  
Jervis B. Webb Company  
Johnston-Vermette  
Kempe International  
LOI, Inc. Industrial Furnaces  
Pyrotek Inc  
Rex Roto Corp.  
Scharf Westfalia Industrial Systems GmbH  
Seco/Warwick  
SETARAM  
Thermal Systems America  
Tyco Flow Control  
Wienalco

## **PUBLISHERS**

33 Metalproducing  
Aluminium Times  
Aluminium Today  
Cambridge Scientific Abstracts  
Giesel/Verlag GmbH—Aluminium

Industrial Heating Magazine  
Kluwer Academic Publishers  
Light Metal Age  
Metal Bulletin LLC  
Metallurgical Society of CIM  
R & D Carbon Ltd.  
SciDoc Inc

### **RECYCLING/SCRAP PROCESSING**

Almeq Norway a/s  
Asbury Fluxmaster  
Hencon B.V  
Holton Conform  
LOI, Inc. Industrial Furnaces  
LVE Verfahrenselektronik GmbH  
Mechatherm International Inc.  
Metallics Systems Co. L.P.  
Scharf Westfalia Industrial Systems GmbH  
Stein Atkinson Stordy Ltd  
Thermcon Ovens  
Thorpe Technologies

### **REFRACTORY & INSULATING: PRODUCTS**

Blasch Precision Ceramics  
BNZ Materials, Inc.  
Borgestad Fabrikker AS  
Christy Refractories  
Clayburn Industries Ltd  
Fosbel Inc  
Gillespie & Powers, Inc.  
Gouda Vuurvast N V  
Jayne Industries

Kabert Industries  
maerz-gautschi ltd.  
McAllister Mills, Inc.  
Minteq International Inc  
Murlin Chemical Inc  
National Refractories & Minerals Corp  
Plibrico Co.  
Pryor Giggey Co.  
Pyrotek Inc  
Resco Products Inc  
Rex Roto Corp  
RHI Refractories America  
Saint-Gobain Ceramics & Plastics Inc.  
SELEE Corporation  
Skamol Inc.  
Stellar Materials  
Thermal Ceramics  
Thermal Systems America  
Thermcon Ovens  
Vesuvius  
Vulcan Refractories Ltd  
Zircar Ceramics Inc  
ZYP Coatings, Inc.

### **MAINTENANCE/REPAIR**

Borgestad Fabrikker AS  
Clayburn Industries Ltd  
Minteq International Inc  
National Refractories & Minerals Corp  
Pryor Giggey Co  
Resco Product Inc  
Vesuvius

### **RESEARCH & DEVELOPMENT**

Albany Research Ctr/US Dept of Energy  
Clayburn Industries Ltd  
Minteq International Inc

Oak Ridge National Laboratory  
SciDoc Inc  
S.T.A.S.  
Wagstaff Inc.

### **SAWING SYSTEMS**

Alu-Cut International Inc.  
Mag Chem Inc.  
Sermas Industrie

### **SERVICE CONTRACTORS**

BHA Group  
Christy Refractories  
Clayburn Industries Ltd  
Hatch Kaiser  
Hotwork  
Noell Crane & Service Inc  
Pryor Giggey Co.  
R&D Carbon Ltd  
SciDoc Inc

### **VEHICLES FOR POTROOMS & CASTHOUSES**

Hencon  
Techmo Car S.p.A.

### **WATER COOLING & TREATMENT**

Betz Dearborn  
Mechatherm International Limited  
Nalco Chemical Company  
US Filter

### **X-RAY DIFFRACTION**

Bruker AXS

## **EXHIBITION SCHEDULE OF EVENTS**

### **Show Hours:**

Monday, 12 February 2001

**New Hours: 12:00 Noon–6:00 PM**

Tuesday, 13 February 2001

9:30 AM–5:00 PM

Wednesday, 14 February 2001

9:30 AM–3:00 PM

### **Grand Opening Reception:**

Monday, 12 February

5:00–6:00 PM

*Enjoy complimentary  
hors' d'oeuvres, music and  
cocktails while touring  
the show floor!*

### **Complimentary Lunch:**

Tuesday, 13 February

12:00–1:30 PM

*Redeem the ticket in  
your registrants packet  
for lunch, hosted by  
the Exhibitors and TMS.*

### **Afternoon Snack Giveaway:**

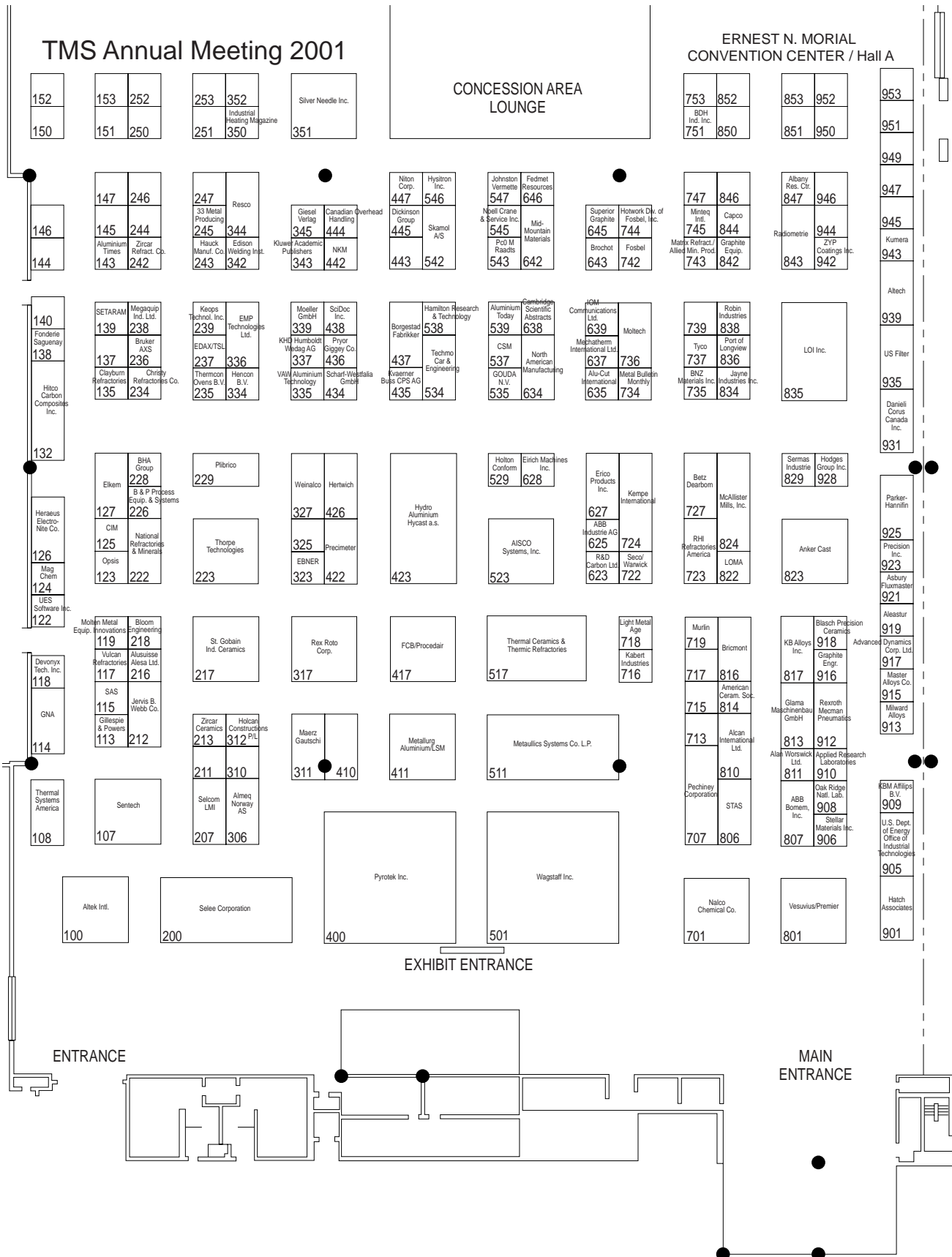
Wednesday, 14 February ..... 12:15 - 2:15 PM

# FLOORPLAN

## ... AS OF OCTOBER 13, 2000

### TMS Annual Meeting 2001

### ERNEST N. MORIAL CONVENTION CENTER / Hall A



152	153	252	253	352	Silver Needle Inc. Industrial Heating Magazine
150	151	250	251	350	

CONCESSION AREA LOUNGE

753	852	853	952	953
BDH Ind. Inc.				
751	850	851	950	951

146	147	246	247	344	Resco
	145	244	245	343	33 Metal Producing
144	143	242	243	342	Hauk Refract. Co.

447	546	547	646
Nilon Corp.	Hyltron Inc.	Johnston Vermette	Fedmet Resources
445	545	548	645
Dickinson Group	Pro M Raads	Mid-Mountain Materials	Superior Graphite
443	542	543	642
Skamol A/S			Hotwork Div. of Fosbel Inc.

747	846	847	946
Minteq Ind.	Capco	Albany Res. Ctr.	
745	844	848	944
Matrix Refract./ Allied Min. Prod.	Graphite Equip.	Radiometric	ZYP Coatings Inc.
743	842	843	942

140	139	238	239	336	EMP Technologies Ltd.
Fonderie Saguenay	SETARAM	Megaquip Ind. Ltd.	Keops Technol. Inc.	237	EDA/XTSL
138	137	236	238	337	337
	135	234	235	334	335

539	638	639	736
Aluminum Today	Scientific Abstracts	HCM Communications Ltd.	Moltech
537	637	637	736
CSM	North American Manufacturing	Mechathem International Ltd.	Alu-Cut Monthly
535	634	635	734
GOUDA N.V.			

739	838	835
Robin Industries	Port of Longneiw	LOI Inc.
737	836	
Tycor	Jayne Industries Inc.	
735	834	
BNZ Materials Inc.		

127	228	229	327	426
Elkem	BHA Group B & P Process Equip. & Systems	Pitirico	Weinalco	Hertwich
125	226		325	422
CIM	National Refractories & Minerals	Thorpe Technologies	EBNER	Precimeter
123	222	223	323	422
Opis				

529	628	627	724
Holton Conform	Erich Machines Inc.	Erico Products Inc.	Kempe International
523	625	623	722
AISCO Systems, Inc.	ABB Industrie AG	R&D Carbon Ltd.	Saco/ Warwick

829	928	824	924
Sermas Industrie	Hodges Group Inc.	RHI Refractories America	McAllister Mills, Inc.
823	923	823	923
Anker Cast			

119	218	217	317	417	517	718	816
Molten Metal Equip. Innovations	Bloom Engineering	St. Gobain Ind. Ceramics	Rex Roto Corp.	FCB/Procedair	Thermal Ceramics & Thermic Refractories	Light Metal Age	Brimont
117	216	217	317	417	517	716	816
Vulcan Refractories	Alusuisse Alusa Ltd.					Kabert Industries	American Ceram. Soc.
115	212	217	317	417	517	716	816
SAS	Jervis B. Webb Co.						

511	611	711	811
Metallurg Aluminium/LSM	Metallurg Aluminium/LSM	Metallurg Aluminium/LSM	Metallurg Aluminium/LSM

813	912	817	916
KB Alloys Inc.	Bischo Precision Ceramics	KB Alloys Inc.	Graphite Engr.
811	910	811	910
Alka Worswick Ltd.	Applied Research Laboratories	Alka Worswick Ltd.	Applied Research Laboratories

108	107	207	306
Thermal Systems America	Sentech	Selcom LMI	Almeq Norway AS

400	501
Pyrotek Inc.	Wagstaff Inc.

707	806	807	906
Pachiney Corporation	STAS	ABB Bomem, Inc.	Oak Ridge Natl. Lab.

100	200	400	501
Altek Int.	Seleco Corporation	Pyrotek Inc.	Wagstaff Inc.

701	801	901
Nalco Chemical Co.	Vesuvius/Premier	Hatch Associates

# ALPHABETICAL LISTING OF EXHIBITORS

As of 10/13/00

COMPANY	BOOTH #	COMPANY	BOOTH #	COMPANY	BOOTH #
33 Metalproducing	245	Graphite Engineering & Sales	916	NITON Corporation	447
ABB Bomem, Inc.	807	Graphite Equipment Mfg Inc	842	NKM	442
ABB Industrie AG	625	Hamilton Research & Technology	538	Noell Crane & Service Inc	545
Advanced Dynamics Corp Ltd.	917	Hatch Kaiser	901	North American Manufacturing	634
AISCO Systems, Inc.	523	Hauck Manufacturing Co	243	Oak Ridge National Lab	908
Alan Worswick Ltd	811	Hencon B.V.	334	Opsis	123
Albany Research Center	847	Heraeus Electro-Nite Co	126	Pc0 M Raadts	543
Alcan International Ltd	810	Hertwich Engineering	426	Parker-Hannifin	925
Aleastur	919	Hitco Carbon Composites Inc.	132	Pechiney Corporation	707
Almeq Norway AS	306	Hodges Group Inc.	928	Plibrico	229
Altech	939	Holcan Constructions P/L	312	Port of Longview	836
Altek	100	Holton Conform	529	Precimeter, Inc.	422
Alu-Cut International	635	Hotwork Div of Fosbel, Inc.	744	Precision Inc.	923
Aluminium Times	137	Hydro Aluminium Hycast a.s.	423	Procedair Industries/FCB Aluminum	417
Aluminium Today	539	Hysitron Inc	546	Pryor Giggey Co.	436
Alusuisse Alesa Ltd.	216	IOM Communications Ltd.	639	Pyrotek Inc.	400
Anker Cast	823	IMS Ltd.	950	R&D Carbon Ltd.	623
Applied Research Laboratories	910	Industrial Heating Magazine	350	Radiometrie Corp	843
Asbury Fluxmaster	921	Jayne Industries Inc.	834	Resco Products Inc	344
B & P Process Equip & Systems	226	Jervis B Webb Co.	212	Rex Roto Corp	317
BDH Industries	751	Johnston-Vermette	547	Rexroth Mecman Pneumatics	912
BetzDearborn	727	Kabert Industries	716	RHI Refractories America	723
BHA Group Inc	228	KB Alloys Inc	817	Robin Industries	838
Blasch Precision Ceramics	918	KBM Affilips B.V.	909	St Gobain Ceramics & Plastics Inc	217
Bloom Engineering	218	Kempe International	724	Scharf-Westfalia GmbH	434
BNZ Materials Inc	735	Keops Technologies Inc	239	SciDoc Inc	438
Borgestad Fabrikker	437	KHD Humboldt Wedag AG	337	Seco/Warwick	722
Bricmont Inc	816	Kluwer Academic Publishers	343	Selee Corporation	200
Brochot SA	643	Kumera	943	Sentech Corporation	107
Bruker AXS	236	Kvaerner Buss CPS AG	435	Sermas Industrie	829
Cambridge Scientific Abstracts	638	Light Metal Age	718	SETARAM	139
Canadian Overhead Handling	444	LMI Selcom	207	Silver Needle Inc	351
Capco Machinery Systems Inc	844	LOI Inc	835	Skamol Inc	542
Christy Refractories Co	234	Loma Machine Mfg. Co.	822	STAS	806
Clayburn Industries Ltd	135	London & Scandinavian Metallurgical	411	Stein Atkinson Stordy Ltd	115
CSM Industries Inc	537	maerz-gautschi Industrial Furnaces	311	Stellar Materials Inc	906
Danieli Corus Canada Inc	931	Mag Chem	124	Superior Graphite Co	645
Devonyx Technologies Inc	118	Master Alloys Co.	915	Techmo Car & Engineering	534
The Dickinson Group	443	Matrix Refractories/Allied Mineral Products	743	Thermal Ceramics	517
Ebner Furnace Co.	323	McAllister Mills, Inc.	824	Thermal Systems America	108
EDAX/TSL	237	Mechatherm International Ltd	637	Thermcon Ovens BV	235
Edison Welding Inst	342	Megaquip Ind Ltd	238	Thorpe Technologies	223
Eirich Machines Inc	628	Metal Bulletin Monthly	734	Tyco Flow Control – Terry	737
Elkem Metals	127	Metallurg Aluminium	411	UES Software Inc.	122
EMP Technologies Ltd.	336	Metallurgical Society Of CIM	125	U S Dept of Energy	
Erico Products Inc	627	Metaullics Systems Co. L.P.	511	Office of Industrial Technologies	905
FCB Aluminum/Procedair	417	Mid-Mountain Materials	642	US Filter	935
Fedmet Resources Corp	646	Milward Alloys	913	VAW Aluminium-Technology	335
Fonderie Saguenay	138	Minteq International Inc	745	Vesuvius	801
Fosbel	742	Moeller GmbH	339	Vulcan Refractories	117
Giesel Verlag/Aluminium	345	Moltech	736	Wagstaff Inc	501
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# COMPANY PROFILES

## A

### ABB Bomem, Inc.

#807

www.bomem.com  
Québec, Canada

Metallurgical Industry

ABB Bomem's Metallurgical Instruments offer many effective solutions to the aluminium industry for inclusion and hydrogen measurement. Several measurement technologies are patented and licensed exclusively to ABB Bomem for worldwide distribution by Alcan International Limited and N-TEC. ABB Bomem also offers metallurgical technical support and metallographic analysis service.

### ABB Industrie AG

#625

www.abb.ch/industrie  
Baden-Dättwil, Switzerland

ABB's Business Unit Building Material & Mineral Industries, headquartered within ABB Industrie AG, Switzerland, offers single products and site services up to large turnkey electrification for the construction, extension and modernization of smelter operations, mineral extraction and production facilities worldwide.

Owners, producers, suppliers, consultants and their engineers have come to appreciate the value of a single source to resolve critical issues. ABB safeguards the client's investment and ensures results by providing an integrated approach to engineering, supply, construction and management (ESCM).

ABB covers the full value-added chain, from the bauxite mine to the primary aluminum. We excel at merging equipment, skills and services into a comprehensive customized solution that strengthens our clients' entire operation. ABB leads the market in key electrical generation, distribution and transformer rectifier systems.

### Advanced Dynamics Corp Ltd.

#917

St Bruno, Quebec, Canada

Advanced Dynamics Corp. Ltd. designs and manufactures custom materials handling systems for primary aluminum smelters and secondary aluminum products producers.

#### Primary Producers

- Carbon anode handling equipment for both green and baked anodes, rodding room and ring furnace maintenance equipment
- Aluminum ingot sawing and identification equipment for round logs, T ingots and sheet ingots

- Aluminum ingot handling systems including downenders, billet stacking systems, transfer cars and rotary turntables
- Aluminum casting equipment including sow casting carousels and crucible tilters

#### Secondary Producers

- Coil handling equipment including turnstiles, powered transfer cars, wrapping systems and upenders.
- Tube handling cooling systems for drawbench automation, extrusion handling systems including pullers and flying cutoff saws.

#### Integrated Control Systems

- Computer linked PLC controls with panelview access screens, programmable identification by pin of character stamp, ink jet or bar code.

Please call us at your convenience at (450) 653-7220 to discuss your equipment requirements and visit us at booth #917 at the 2001 TMS Show.

### AISCO Systems Inc.

#523

http://www.aiscosystems.com  
Burlington, Ontario, Canada

Aisco Systems Inc. provides engineered machinery, systems and integrated process solutions for aluminium smelter rodding rooms, casthouses and copper tankhouses

Aisco Systems Inc. provides engineered machinery, systems and integrated process solutions for the non ferrous metals industry including aluminium rod shops and casthouses, zinc refineries and copper tankhouses

**Rodding Room:** Aisco is a technical leader in supplying rodding room equipment, from anode loading/unloading, butt bath cleaning systems, butt and thimble presses and rod reconditioning equipment through to anode and rod mating stations and iron pouring systems

**Casthouse:** Aisco design and manufacture sow casting and foundry ingot casting systems, including stacking and strapping equipment for use in primary and secondary facilities. In addition, we provide sawlines with fully automated material handling for slab/t-bar and billets

**Copper Tankhouse:** Aisco produces copper anode preparation and tankhouse machinery and solutions to your tankhouse problems. Our unique carousel design provides high production rates and efficient use of plant space

**Zinc Refining:** Aisco has a licence with Asturiana de Zinc of Spain to manufacture zinc processing machinery for the cellhouse

Please call Aisco to discuss your equipment requirements or visit us at booth #523 at the 2001 TMS Annual Meeting & Exhibition.

### Alan Worswick Ltd

#811

http://www.worswick.com  
Blackburn, England

Since its formation in 1960, Alan Worswick (Engineering) Ltd has developed and refined its unique rotary ingot casting machine together with downstream ingot handling equipment including ingot cooling conveyors and ingot stacking machines to provide a complete - automated ingot production system for most primary and secondary non-ferrous ingot production, enabling them now to offer the most comprehensive equipment list within this field.

Over the years, "Worswick" became known as an innovative designer and manufacturing company resulting in the receipt of many enquiries and subsequent orders for specialised machines for the non-ferrous metal industry including; billet stackers, anode producing machines, sow/block casters, lead dross removal machines and automated gravity diecasting machines, in fact equipment to produce everything from zinc balls to aluminium engine blocks.

To date, "Worswick" has built more than 300 casters and 100 stackers of various types and would be pleased to discuss your requirements from either our existing extensive range, or for custom designed - special purpose machines, either at Booth No. 811 at the 2001 TMS Annual Meeting Exhibition in New Orleans or e-mail us at sales@worswick.com

### Albany Research Center

#847

http://www.alrc.doe.gov  
U.S. Department of Energy  
1450 Queen Avenue, SW  
Albany, OR 97321  
contact: Paula Palmer -  
palmer@alrc.doe.gov

The Albany Research Center is a U.S. government materials research and development laboratory conducting research programs and collaborating in partnership with industries and other agencies, to provide solutions for corrosion, wear, melting and casting, and waste generation in industrial and power generation systems. Researchers at the Center determine factors that limit service life of materials, provide solutions to service-life problems through new materials technology, and develop and demonstrate technologies that reduce waste and pollution in materials processing and forming. Featured will be the following: Thin Walled Ferrous Castings, Low-Cost Titanium Production, and Recycling/Remediation of Solid, Liquid and Hazardous Waste.



## **Alcan International Ltd**

**#810**

Montreal, Quebec, Canada

## **Aleastur**

**#919**

<http://www.aleastur.com>

Aviles, Asturias, Spain

## **Asturiana de Aleaciones, S.A.**

Pol. Ind. de Maqua, s/n AVILES

E33400 SPAIN

Phone: +34 98 5129038

E-mail: [aluminium@aleastur.com](mailto:aluminium@aleastur.com)

Aleastur manufactures a comprehensive range of Grain Refiners and Master Alloys. The major activity is concentrated in the production of AlTiB alloys in rod completing its product range with other alloys such as AlSr, AlB, AlTi, AlZr, etc.

From receipt of order to despatch of goods, the dedication of Aleastur to quality is paramount. Aleastur has had since 1993 the Certificate of Approval for Quality Assurance (ISO 9002).

Currently, Aleastur is selling its products to more than 50 countries and is represented all around the world.

## **Almeq Norway AS**

**#306**

Langhus, Norway

## **Altech**

**#939**

Lynghals 10,

110 Reykjavik, Iceland

Tel. +354 5252300

Fax. +354 5252319

Machines and Computer Systems for the Aluminium Industry.

ALTECH has supplied machines, robots and computer systems to the aluminium industry in all the five continents since 1987.

We kindly invite you to our booth No. 939 for presentation of:

**ALTRACK** - anode and rod tracking system

**ALVISION** - visual inspection system for rods and anodes

**ALCODE** - aluminium billet coding and tracking system

### **Automatic Metal Skimmers for Crucibles**

Innovative equipment for Anode Rodding Shops:

- Stub Protection System
- Stub Straightening System
- Casting Machines
- Stub and Rod Repair Facilities
- Complete Anode Rodding Shops

## **Altek International Inc**

**#100**

<http://www.altek-dross.com/>

**Exton, Pennsylvania**

ALTEK International, Inc. and its staff have been active in the recycling of aluminum dross for nearly 30 years. We have devoted many years to researching and developing dross treatment processes and equipment, always striving to offer the safest, most efficient and environmentally clean systems for the aluminum industry.

### **OUR SERVICES:**

- Worldwide Sales and Marketing of THE PRESS and THE TUMBLER
- Consulting Services
- Custom Design & Engineering
- Training & Customer Support
- Product & Process Development
- Dross & By-Product Marketing Support
- North American Sales Representative for REMETAL, SA (SPAIN) TECHNOLOGY

### **OUR DROSS RECYCLING TECHNOLOGY:**

- PHASE I - THE PRESS, The Hot Dross Treatment System
- PHASE II - THE TUMBLER, The Low Impact Cold Dross Treatment System

## **ALTEK**

## **INTERNATIONAL INC.**

314 Exton Commons

Exton, PA 19341

Tel: (610) 524-6291

Fax: (610) 524-6295

e-mail: [altek@altek-dross.com](mailto:altek@altek-dross.com)

## **Alu-Cut International, Inc**

**#635**

21710 Moortown Circle

Katy, Texas 77450

Tel: 281/579-3377

Fax: 281/579-8819

e-mail: [alucut@texas.net](mailto:alucut@texas.net)

Melting, holding, and homogenizing furnaces. Cooling chambers, charging machines, casting machines, saws, material handling, lubrication and briquetting systems.

## **Aluminium Times**

**#137**

Shaveham-by-Sea, United Kingdom

## **Aluminium Today**

**#539**

Redhill, Surrey, England

**Working with Industry for the Past  
Eleven Years**

Aluminium Today is a leading international journal for the aluminium production and processing

industries. Read widely for its industry news and technology reports, Aluminium Today charts closely developments from around the world. Aluminium Today is published by DMG Business Media Ltd.

## **Alusuisse Alesa Ltd.**

**#216**

Westmount, Quebec, Canada

Serving the industry from their engineering offices in Switzerland, North America and Australia, Alusuisse Alesa has a deservedly excellent reputation in the field of materials handling as well as technologies for the production of alumina and anodes. Furthermore, Alesa offers Alusuisse's proven know-how for the complete retrofit of smelters.

Alesa specializes in turnkey projects featuring systems which emphasize low energy consumption, operational efficiency, environmental protection and automation that ensure competitive advantages for the client. Innovative skills and experience in solving clients' problems have characterized Alesa projects worldwide for over 30 years.

## **Anker Cast**

**#823**

Mississauga, Ontario, Canada

Anker Cast, with many years of experience in Direct Chill Casting systems will feature the latest advances in casting technology, automation and equipment. Our personnel will be in the booth to discuss your applications and methods for increasing your productivity. Come meet with us and discover how you can improve your bottom line.

## **Applied Research Laboratories**

**#910**

Dearborn, Michigan

For over 60 years, Applied Research Laboratories (ARL) has been a leading innovator in analytical instrumentation. ARL's current product offering includes a series of optical emission (OE) spectrometers known for precision, accuracy and reliability. In addition, ARL manufactures sequential and simultaneous X-Ray fluorescence (XRF) instrumentation featuring: integrated XRD, fast gearless goniometer, small footprint and large X - Y sample changer. Both XRF and OE spectrometers are available as fully automated laboratories.

## **Asbury Fluxmaster**

**#921**

<http://www.asbury.com>

Rodeo, California

ASBURY FLUXMASTER, a division of Asbury Carbons, is a vendor of quality consumable foundry materials. Our QS-9000 certified facility in Utah produces a wide range of aluminum

fluxes, titanium/boron master alloys, degasser tablets, coatings, and injection fluxes. ASBURY FLUXMASTER also markets an entire line of aluminum master alloys produced by our partner, ALEASTUR.

ASBURY FLUXMASTER offers customers the benefits of a professional, knowledgeable staff, a proven line of products, custom packaging options, and quality customer service. Asbury Fluxmaster products are marketed in the United States through our network of Territory Managers and distributors. Fluxmaster also has international agents and sales in over 20 countries.

## B

### B&P Process Equipment & Systems

#226

<http://www.bpprocess.com>  
Saginaw, Michigan

B&P Process Equipment and Systems, Inc. (manufacturers of Baker Perkins machinery) is a supplier of specialized process equipment for the production of carbon paste, energetic material, plastics, industrial chemicals, and for chemical separation. We have supplied batch anode and cathode paste mixers to the aluminum industry since 1903. Many built since the 1930's are still in service. In 1952, the aluminum industry production requirements grew, and we offered the polykneader, which is a continuous carbon paste mixer. Today, our batch mixers and polykneaders are used worldwide in the production of carbon paste. B&P also offers a complete line of continuous pusher centrifuges for liquid/solids separation.

### BDH Industries

#751

<http://www.bdhtech.com/>  
Chicoutimi, Quebec, Canada

### BetzDearborn

#727

[www.betzdearborn.com](http://www.betzdearborn.com)  
Trevose, Pennsylvania

BetzDearborn markets engineered water treatment programs that use customized products and value-added services in solving problems associated with boilers, cooling towers, and influent and effluent systems in a wide variety of industries, commercial establishments, and institutional facilities. Hundreds of BetzDearborn researchers simulate the operation of a water system, troubleshoot, and isolate problems in one of the largest water research facilities in the world.

### BHA Group, Inc.

#228

<http://www.bhagroup.com>  
Kansas City, Missouri

BHA Group, Inc. is a leading worldwide supplier of replacement parts and services for air pollution control equipment. BHA offers a wide range of innovative products, including Pulse Pleat<sup>®</sup>, Pleated Filter Elements, BHA-TEX<sup>®</sup>, expanded PTFE membrane filters, and CPM<sup>®</sup>. Particulate Detection Systems. Serving more than 50 industry groups across six continents, BHA is known globally for its quality products and troubleshooting expertise. As we complete our 25<sup>th</sup> year in this business, there isn't a problem or situation that we haven't seen. Call your BHA representative at 1-800-821-2222 or visit our website at [www.bhagroup.com](http://www.bhagroup.com).

### Blasch Precision Ceramics

#918

<http://www.blaschceramics.com/>  
Albany, New York

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 (+/-0.5%), excellent thermal shock resistance, controlled porosity, sub-particle distribution control, and outstanding resistance to spalling, erosion, and metal penetration.

In addition, parts intended for aluminum applications are treated with a proprietary non-wetting agent. So whether you need low pressure stalk tubes, rotary degassers, thermocouple protection tubes, porous plugs, or immersion heater tubes, Blasch can deliver.

A dedicated staff of engineers is always available to develop materials and design parts that satisfy specific customer needs. We welcome you to visit us at booth 918.

### Bloom Engineering Co.

#218

<http://www.bloomeng.com>  
Pittsburgh, Pennsylvania

Representatives from Bloom Engineering Company will be available to discuss Bloom's complete line of Ultra Low NO<sub>x</sub> burners for the non-ferrous industry. These will include 1500 Series Cold Air Burners, 1630 Series Recuperative Burners and 1150 Series Regenerative Burner designs, currently the lowest NO<sub>x</sub> producing burners in the industry.

Bloom specializes in optimizing the burner combustion pattern required for the application. Burner designs are based on extensive experience obtained in the ferrous and nonferrous industries, and computer aided design techniques, to provide uniform, efficient heating for the process.

### BNZ Materials Inc.

#735

<http://www.bnzmaterials.com>  
Littleton, Colorado

BNZ Materials, Inc. consists of two businesses which are appropriate to the metals industry. The Zelienople, Pennsylvania plant manufactures/markets Insulating Firebrick and complementary refractory products such as mortars, aggregates, castables and calcium silicate block. Insulating Firebrick are used in a variety of applications in the metals industry, from carbon baking furnaces to melting and holding furnaces.

The Billerica, Massachusetts plant manufactures a line of calcium silicate boards under the Marinite trademark. They are machined into various parts for conveying, containing, and forming aluminum, lead, zinc, tin and other non-ferrous metals. These parts include spouts, floats, launders, distribution plates, head boxes, baffles, headers, tips, rings, distribution boxes, stoppers, basins, snouts, orifice plates, hot top and ingot mold liners as well as parts in the metal handling and casting systems of many casting machines.

### Borgestad Fabrikker AS

#437

Porsgrunn, Norway

Borgestad Fabrikker AS founded in 1887, started as brickworks but grew rapidly into a producer of quality refractories. In 1996, Höganäs Bjuf, with more than 200 years experience of manufacturing refractory bricks, became a part of Borgestad. Today Borgestad is truly international, exporting over half its production and is the largest supplier of non-basic refractories to furnace and kiln related industries.

Products that ensure long life and maximum performance are only one part of the Borgestad commitment to customer satisfaction. Projecting, project control, contracting, installation, repair and maintenance are services we offer to ensure that your furnaces run smoothly with down-time periods kept at a minimum.

### Bricmont Inc

#816

<http://www.bricmont.com>  
Canonsburg, Pennsylvania

Owners of the Davy-Swindell aluminum furnace technology.

- Complete engineering for design and construction of melting and holding furnaces, pusher and batch slab reheating furnaces, coil annealing and log homogenizing furnaces, and related equipment.
- Project and construction management.
- Turnkey installations.
- Analysis and consulting services for combustion, heat transfer, thermal stress, thermodynamics, failure, and structural related problems.

- High temperature materials technology and heating process development.
- Feasibility, planning, layout, and conceptual design studies.
- Field engineering, start-up assistance, cost estimating, furnace inspection and evaluation.
- Energy audits.
- Maintenance and operations training.
- Computer-based control systems for melting and holding furnaces, reheating, soaking pits, and annealing furnaces. Dynamic simulation process modeling.

## Brochot SA

#643

Tremblay FRANCE

The BROCHOT company designs, manufactures, carries out the installation, provides after sales services, provides spare parts of special machines, and complete plants for the primary aluminium and magnesium industries. With its three departments, Brochot -Syprim - Berger, BROCHOT proposes the full range of equipment necessary for aluminium smelters:

BROCHOT:

- Electric pot ramming machines
- Ingot casting & stacking lines
- Dross handling equipment (Ekumax)

SYPRIM:

- Anode cooling
- Anode handling and storage
- Anode rodding shop

BERGER:

- Special vehicle for anode & molten metal transport
- Furnace charging & tending vehicles

Come to our booth #643 and find out more on our latest developments and discuss innovative solutions to your equipment.

## Bruker AXS

#236

<http://www.bruker-axs.com/production/indexie.htm>

Madison, Wisconsin

We offer a full range of analytical solutions for X-ray Spectrometry (XRF), X-ray Diffraction (XRD) and Single Crystal Diffraction.

**X-ray Spectrometry (XRF):** Multi-element analysis in solids and liquids

**X-ray Diffraction (XRD):** Analysis of matter: from liquids, powders, thin films to perfect crystals

**Single Crystal Diffraction (SCD):**

Structural analysis down to atomic resolution

**Training:** Get the best out of your instruments!

C

## Cambridge Scientific Abstracts

#638

<http://www.csa.com/>  
Bethesda, Maryland

Cambridge Scientific Abstracts publishes a wide variety of databases covering all aspects of science and technology. Databases are delivered through the new Internet Database Service Version 5.0, featuring site-wide access with unlimited use. Databases offered through this service include METADEX, Sociological Abstracts, Aquatic Sciences & Fisheries Abstracts (ASFA), and the NTIS Database. Other features include the Web Resources Database, which provides searchable links to Internet information sources in the sciences; Recent References Related to Your Search, a citation-only current-awareness service; and full text document acquisition features including Links-to-Full text and Link-to-Holdings modules.

## Canadian Overhead Handling

#444

Mississauga, Ontario, Canada

COH specializes in building custom overhead cranes for the most demanding conditions. The exhibit will feature video, photos and literature on some of our installations including powerhouse cranes, automotive (frame handling, frame turnover and body marriage), aluminum industry (automatic anode stacking, hot metal, ingot handling and pot shell transporting), steel mill, transfer cars, automatic bulk handling for the cement industry and aircraft maintenance teleplatforms.

## Capco Machinery Systems Inc

#844

[www.capcomachinery.com/](http://www.capcomachinery.com/)  
Roanoke, Virginia

Capco<sup>®</sup> Machinery Systems, Inc., located in Roanoke, VA is a family owned business and the only remaining American manufacturer of roll grinding machines. The Capco<sup>®</sup> SuperGrinders are designed for highest accuracy, best productivity and long life time. Capco<sup>®</sup> SuperGrinders have a very good reputation in the Aluminum Industry.

Capco<sup>®</sup> will display information material of its families of SuperGrinders for the Aluminum Industry as well as its roll shop computer system RSCS.

## Christy Refractories Co

#234

[www.christyco.com](http://www.christyco.com)  
St. Louis, Missouri

Christy Refractories has specialized since 1922 in customized refractory solutions for the non-ferrous industry and offers:

- Custom crafted<sup>™</sup> fabricated shapes
- Ref-SiC<sup>™</sup> (clay bonded) and NITRO-SiC<sup>™</sup> (nitride bonded) Silicon Carbide shapes.
- A full line of refractory and insulation products
- Refractory contracting services
- Christy Cast FS<sup>™</sup> castable shapes for down spouts, stalk tubes, sucker tubes, launders, nozzles and filter bowls.

We are pleased to introduce a line of ceramic materials for use in high temperature, extreme wear and metal contact applications. Initial results with shot tubes have extended the use life ten-fold.

## Clayburn Industries Ltd.

#135

<http://www.clayburngroup.com>  
Abbotsford,  
British Columbia, Canada

Clayburn Industries Ltd. is a privately owned company, in business since 1905. From our head office location in Abbotsford, British Columbia, Canada (50 miles east of Vancouver, Canada) we manage the sales and services of Refractory supply, distribution, engineering and installation throughout Canada, USA and for export.

Clayburn operates manufacturing plants in Abbotsford, BC, and Medicine Hat, Alberta, Canada. We also own and operate a plant in Xianyang, Shaanxi Province, China, under the name of Xianyang - Clayburn Refractory Co. Ltd.

Clayburn's sales and services include the supply and installation of a full range of monolithic products including, dense and insulating castables, plastics and gunnite - shotcrete materials. We also offer insulating and dense refractory brick, including high Alumina and Basic products for a broad range of applications.

Information and personal contacts can be made at our booth, number 135, at the 2001 TMS annual meeting in New Orleans.

More information on our Company and its operations can be seen on our web page at [www.clayburngroup.com](http://www.clayburngroup.com)

## CSM Industries Inc

#537

<http://www.csmindustries.com>

Cleveland, Ohio

CSM Industries is the world's largest producer of molybdenum powders and can offer a wide variety of sizes and purity to meet any need. From extremely fine Metal Injection Molding powders to flowable Thermal Spray powders, stringent specifications for molybdenum powders can be met by CSM's expansive powder production capabilities.

## D

## Danieli Corus Canada Inc

#931

<http://www.corusgroup.com/>

Burlington, Ontario, Canada

## Devonyx Technologies Inc

#118

[www.devonyx.com](http://www.devonyx.com)

Montreal, Quebec, Canada

DEVONYX is an engineering firm specializing in Primary and Remelt Light Metals.

DEVONYX major Clients include Alcan, Noranda, Alcoa and Q.I.T.

### DEVONYX's Services include:

Consulting (Project definition, Feasibility studies, Comparative studies including cost analyses and Plant productivity improvement studies), Process, Dynamic Simulation, Engineering, Industrial Programming, Project and Construction Management, Commissioning, Start-up and Interactive Training.

### DEVONYX's Expertise covers:

Handling and Storage of raw materials and alloy powders, Siphon systems, Furnaces (Holding, Casting, Induction), Launder systems, Ingot casting machines, Casting wheels (sow and small forms), D.C. casting, Continuous Homogenizing furnaces, Continuous Horizontal Casting machines, Drop forge presses, stamps, Homogenization, Sawing center.

## The Dickinson Group

#443

Richards Bay, South Africa

## E

## Ebner Furnace

#323

## EDAX Inc./TSL

#237

Mahwah, New Jersey

Phoenix and Falcon Systems, energy dispersive x-ray analysis, microanalytical and x-ray spectrometry markets with PC-based systems for qualitative and quantitative elemental analysis. Grain orientation and phase identification is carried out with the TSL product line using electron backscatter diffraction, grain mapping and grain size analysis. The Waste Fume Analyzer available to help increase production yield by on-line analysis of metals in fumes arising from steel-making.

## Edison Welding Institute

#342

<http://www.ewi.org/>

Columbus, Ohio

EWI provides practical welding and joining solutions through technical assistance, contract research, consultancy and training to 400 member companies worldwide.

## Eirich Machines Inc

#628

<http://www.eirichusa.com>

Gurnee, Illinois

Eirich Machines, Inc. of Gurnee, Illinois, are manufacturers of the Eirich Intensive Mixer noted for the many advantages it provides the metal-lurgy industries, including:

- Significantly reduced process times—pronounced vertical *and* horizontal movement, and high speed mixing pan rotation facilitate 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

## EMP Technologies Ltd.

#336

[www.emptechnologies.com](http://www.emptechnologies.com)

Burton on Trent, Stratfordshire, United Kingdom

In 1992 EMP Technologies introduced a revolutionary new liquid metal circulation and melting system to the aluminium industry.

This powerful and instantly reversible circulation and melting system has no moving parts, accepts a variety of feedstock, guarantees the highest levels of homogeneity with some clients experiencing productivity increases well in excess of 25%.

With no moving parts, the EMP system is inherently reliable. Many installations have now experienced pumping campaigns well in excess of 4 million tonnes per annum with only a routine service each year.

During the coming year EMP Technologies will be launching new products to further enhance its current product portfolio. The commercial package for the EMP System has also been transformed.

The system has far reaching benefits for both Primary and Secondary aluminium operations and also for companies like aluminium wheel manufacturers.

Email: [amp@emp-technologies.co.uk](mailto:amp@emp-technologies.co.uk)

## Elkem Metals, Inc.

#127

Williamsville, New York

## Erico Products Inc

#627

[www.erico.com](http://www.erico.com)

Solon, Ohio

CADWELD® exothermic welding is a process for making large and complex welded electrical connections of aluminum-to-aluminum, copper-to-copper or copper-to-steel in which no external source of heat, such as electricity or gas, is required. The process produces a permanent molecular bond.

CADWELD connections...

- assure that the current-carrying capacity of the connection is equal to or greater than the conductor's.
- will not loosen in service.
- electrical resistance will not increase with age.
- require no maintenance.
- can be made to any size or shape of conductors.

CADWELD connections can be made in a highly magnetic environment.

**F****FCB Aluminium**

#417

<http://www.fcb-group.com/>  
Givors Cedex, France

FCB Aluminium is the world leader in supplying complete green anode plants, with about 40 paste plants supplied all over the world. Depending on Customer's requirements, FCB Aluminium will supply either complete new green anode plants, or some particular process sections (crushing & screening, fines grinding, proportioning, preheating & mixing, vibrocompacting & anodes cooling...etc). FCB Aluminium is also able to upgrade any anode plant or Söderberg paste plant or to convert a Söderberg plant into a prebake green anodes plant while updating the technology and increasing the capacity if needed.

FCB Aluminium is also a major supplier of other units in smelter carbon plants which are:

- bath grinding with totally air swept autogenous mill
- anode butts crushing
- liquid pitch storage
- spent pot lining grinding

FCB Aluminium has developed a wide range of equipment to be incorporated in such plants.

**Fedmet Resources Corp**

#646

Montreal, Quebec, Canada

is a multi-source (and multi-lingual) supplier of refractories, brick, electrodes, carbon-based consumables, select raw materials, and other engineered refractory products used in the metal industry.

We supply refractories and refractory related products to the:

- Iron and Steel Industry
- Non-ferrous Metals Industry
- Cement Industry
- Lime Industry
- Other Industries

We provide refractories and refractory related products such as:

- Magnesite-Carbon Brick
- Electrodes
- Slide Gates & Shroud Products
- Silica and High Alumina Brick
- Insulating and Glass Furnace Brick
- Magnesite-Spinel Brick

**Fonderie Saguenay**

#138

[www.foundry-sag.com](http://www.foundry-sag.com)  
Chicoutimi, Quebec, Canada

Located in Quebec, Canada, Fonderie Saguenay is a jobbing foundry producing gray & ductile iron castings in the weight range of 200-15,000 pounds. A large portion, more than 50%, is dedicated in supplying premium parts to the aluminum industry.

You can benefit from 30 years+ of experience in this field where attention to details makes a big difference. From siphon sections, pouring spouts to one-piece holder siphons and dross pans, solutions are tailor-made to fit your needs.

Lower operating costs are possible with the help of our highly qualified personnel using the most recent software in design and engineering.

**Fosbel**

#742

<http://www.fosbel.com>  
Berea, Ohio

**Aluminum Furnace Repair at Operating Temperature**

The Fosbel ceramic welding process exothermically fuses new refractory to the existing parent material while the furnace continues to operate at temperatures in excess of 1300°F. Ceramic welding creates a long lasting, durable bond between the weld mass and the substrate giving extraordinarily long life to the repair areas, in applications such as metal line, roof, side wall and various other repairs. Inspection services are also available to view and identify hard-to-access problem areas. When used in conjunction with Fosbel's inspection services, ceramic welding is a fast and effective way to keep your furnace in operation without costly downtime.

For further information, visit us at booth #742 or contact us at:

Fosbel Inc.  
640 North Rocky River Drive  
Berea, OH 44017  
Phone: 440-891-0892  
Fax: 440-891-0899  
Website: [www.fosbel.com](http://www.fosbel.com)

**G****Gillespie & Powers**

#113

[www.gillespiepowers.com](http://www.gillespiepowers.com)  
St. Louis, Missouri

- Furnace upgrading and modification-improving efficiency, melt rate and pollution control.
- Sow preheating with our patented reverse flow melter.

- Decoating with our patented mass flow recirculation system, all types of scrap.
- Controlled variable scrap feed systems for conveying, submerging, and salt feed. Two styles of submerging devices.
- Unique designs to resolve specific problems-eliminate water cooling, sealed charging, flat removable roofs, low profile doors and others.
- In the recycling industry, systems include bale breaking, shredding, separation, decoating, vortex submerging, melting and holding furnaces including rotary furnaces, and transport ladles.

**Glama Maschinenbau GmbH**

#813

Gladbeck, Germany

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
- Coil Lift Trucks

**GNA Industrial Furnaces Inc.**

#114

<http://www.gna.ca>  
9495 Trans-Canada Hwy  
St-Laurent, QC H4S 1V3  
Tel: 514-956-1776 /F:514-956-0286

GNA Industrial Furnaces Inc. is a supplier of furnaces and related material handling systems to the aluminum industry. Innovative engineering capability and process knowledge make GNA a superior quality supplier of casthouse furnaces and systems equipment for both primary and secondary producers. GNA also has strong capabilities in cathode and anode assembly systems with several installations in the carbon sector of modern aluminum smelters.

**Gouda Vuurvast N.V.**

#535

Gouda, Netherlands

N.V. Gouda Vuurvast manufactures, supplies and installs high quality refractory materials for close to one century. With production facilities in the Netherlands, N.V. Gouda Vuurvast does supply all major industries throughout the world. The in-

egrated approach of refractory-research, engineering, production and installation (supervision) is unique and enables N.V. Gouda Vuurvast to guarantee high performance refractory applications. Worldwide supply, flexibility, and long-standing experience make N.V. Gouda Vuurvast your reliable partner for all refractory applications.

In the aluminium industry, N.V. Gouda Vuurvast is world-famous for its AK 46 S refractory brick used in Carbon Bake Furnaces of all major designs and its AK 85 range of refractory bricks suitable for all types and designs of holding and melting furnaces.

Contact us at [Sales@goudarefractories.com](mailto:Sales@goudarefractories.com)

## Graphite Engineering & Sales #916

<http://www.graphite-eng.com>  
Greenville, Michigan

Graphite Engineering & Sales Co 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 the following items:

- 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

Visit Graphite Engineering & Sales Co at booth #916 to discuss your graphite requirements.

## Graphite Equipment Mfg Inc #842

Cleveland, Ohio

Graphite Equipment Manufacturing, G.E.M., is a complete molten metal pump and related equipment manufacturer. We offer a full line of 21st century mechanical pumps, and metal treating equipment. G.E.M. exclusively offers a **no contact, no moving parts revolutionary Electromagnetic Stirring System** for the non-ferrous metals industry. We are a full service company with more than 75 years of experience in the industry, providing engineering and technical support for our product line.

Our patented Bi-Axial, Multi-Flow centrifugal pump systems and the GEM2100 Electromagnetic Stirrer are of the state of the art technology for the new millennium. Our centrifugal pump technology includes proprietary materials that significantly increases the life of the system and reduces operating costs.

**H**

## Hamilton Research & Technology

#538

<http://www.hamiltonresearch.com>  
Calcutta, WB, India

Hamilton Research & Technology Ltd. (HART) provides Process Automation for the Aluminium Industry. Specialised in retrofitting of modern Distributed Control Systems for existing Aluminium Smelters and Carbon Anode Baking Furnace.

HART's distributed control system for Aluminum Smelters uses individual Electronic Pot Controllers (EPC) as Distributed control elements connected in a multi drop master slave mode to the Master Computer System. Proprietary control algorithm are customized to suit parameters of individual smelters for optimizing current efficiency. Systems has been implemented in major Aluminium smelters in India (Hindalco, Malco) and abroad (SaAz & BrAz in Russia).

HART has implemented a third generation Heating Regulation System for Carbon Anode baking plant. Individual controllers control the air inlet, draught as well as burner firing to provide accurate adherence to the ideal heating curve. Unique wireless infra red communication system designed for communication between field modules and master computer eliminates frequent maintenance.

## Hatch Kaiser

#901

<http://www.hatch.ca/>  
Mississauga, Ontario, Canada

**Feel free to contact us via email at**  
[ltmetals@hatch.ca](mailto:ltmetals@hatch.ca)

Hatch Kaiser provides engineering and process design, project delivery services, information systems, technology development and implementation, and business consulting to the Light Metals industries: Alumina, Aluminum, Magnesium and Titanium.

## Hauck Manufacturing Co #243

<http://www.hauckburner.com/>  
Lebanon, Pennsylvania

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 pro-

cessing 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.

## Hencon B.V.

#334

Uft, The Netherlands  
e-mail address: [info@hencon.nl](mailto:info@hencon.nl)

### Special Vehicles for the Aluminium Industry

Backed by more than 45 years experience, **Hencon Holland** is a main and worldwide supplier in the field of "**Special Mobile Equipment**" for the aluminium industry.

The delivery program covers the complete range for potroom (Söderberg and prebaked) and for 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
- Pot Trimming Vehicles
- Anode Spading / Tamping Trucks
- Side Loading Forklift Trucks
- Platform Lifting Trucks

At the TMS 2001 Exhibition, Hencon will be present on booth no. 334, where the products of the delivery program will be shown.

### Specific new developments are:

- Combined Furnace Charging / Skimming Machine
- Compact Hot Metal Transport and Tilting Vehicle
- New type Multipurpose Vacuum Cleaner H-3000

## Heraeus Electro-Nite Co #126

Philadelphia, Pennsylvania

Heraeus Electro-Nite Co., the world's largest developer and producer of sensors for the molten metal industry, will be exhibiting several sensors for the primary aluminum smelter.

The Cry-O-Therm™ "Superheat" sensor has been developed to provide the potline with an almost instantaneous reading of the bath and liquidus temperatures. It is being shown that di-

rect measurements of the liquidus temperature in industrial cells by the Cry-O-Therm probe is clearly advantageous compared to the alternative methods for determining the liquidus temperature.

The Positherm-AL® Type "S" disposable thermocouple and DT-280 digital temperature measuring system provide the potroom operator with a faster, more accurate, and more reliable temperature of the cryolite bath. The companion datalogger allows the operator to store the information collected over the course of the day and download it directly into the computer at the end of his shift.

Stop by the HEN booth to learn more about our sensors for the primary aluminum smelter.

## Hertwich Engineering

#426

Ann Arbor, Michigan

Based in Braunau, Austria and having an office in USA, this supplier of equipment to the aluminum industry will be showcasing their entire line of products. This will include, fully automatic inline and stand alone ultrasonic inspection stations, continuous homogenizing and cooling systems ranging from 8,000 tpy up to 140,000 tpy, fully automatic billet sawing and stamping plants, briquetting presses, fully automated billet and log stacking systems complete with bundle manipulation. Also featured will be the compact remelt facilities and horizontal casting systems Hertwich Engineering supply.

## Hitco Carbon Composites Inc.

#132

www.hitco.com

Gardena, California

HITCO CARBON COMPOSITES, INC. has been a manufacturer of high-performance acoustic and thermal insulation materials, components, and systems for more than 50 years.

HITCO is widely known for our *REFRASIL* high temperature textile product line which is ideal for protecting personnel and equipment from high temperatures and molten metal splash. *REFRASIL* textiles resist oxidation, corrosive chemicals, and present no known health hazard. Typical applications include welding blankets, furnace curtains and linings and ceramic fiber replacement.

New in our product line is the *REFRASIL B200* series of silica fiber insulating blanket products with the following unique properties:

- Non-respirable fibers
- Shot free
- Contains no RCF or asbestos
- High strength
- Low shrinkage forms available
- 2000 °F operating temperature

## Hodges Group Inc.

#928

www.hodges-group-inc.com

Portland, Tennessee

Established in 1990, Hodges Group, Inc., is a family owned and operated company specializing in turnkey solutions for construction, industrial maintenance, fabrication and refractory projects. Recipient of the "Industrial Excellence Award" from the Tennessee Department of Economic and Community Development, Hodges Group, Inc., is one of Tennessee's fastest-growing companies with a reputation for service and excellence.

Headed by James G. Hodges, Hodges Group, Inc. is one of the state's leading construction companies offering specialized refractory products and services. More recently, the company completed construction of an \$8 million aluminum recycling plant located in Seneca, New York for Scepter Inc.

Tel: 615-325-2741 Fax: 615-325-3128

Email: [hodges@hodges-group-inc.com](mailto:hodges@hodges-group-inc.com)

## Holcan Constructions P/L

#312

<http://www.holcan.com/au>

Queensland, Australia

The Holcan Welding System offers an alternative to hand, friction or flash butt welding of anode rod studs and adds a degree of automation at a low capital cost.

Our system will outperform manual welding methods by up to 100%. Simplistic design and proven reliability allows for in-house maintenance to be carried out on all pieces of equipment. Therefore, eliminating the need for technical assistance from outside sources.

### APPLICATIONS

Our system can be installed in:

- New facilities
- Existing facilities where its' introduction will increase productivity over manual methods.
- Used as a back up to friction or flash butt welding when equipment has to be overhauled or repaired.

### MAJOR BENEFITS

- Low capital cost
- Consistent weld quality
- Fluctuating workloads easily accommodated.
- Personnel with no prior welding experience can be trained to operate equipment in a short period of time.
- Less staff turnover

## Holton Conform

#529

www.holton-conform.com

Bournemouth, Dorset, England

Holton Machinery Ltd

Albany house, Elliott Road,

West Howe

Bournemouth, Dorset, BH11 8JH,

England

Tel: +44 (0) 1202 581 881

Fax: +44 (0) 1202 581 789

E-mail: [sales@holton-conform.com](mailto:sales@holton-conform.com)

Holton Machinery Limited manufactures the Holton Conform™ range of continuous rotary extrusion machines which are now in profitable production in 22 countries around the world.

Holton Machinery is a world leader in continuous rotary extrusion, with over 20 years experience and the backing of their multi-national parent company Outokumpu.

Holton Conform™ lines are used for the manufacture of high quality master alloys, refrigration and air conditioning tubes and to clad CATV cable and fibre optic communication cable.

Visit us on stand 529 and discover the next generation of continuous rotary extrusion - Conform 2000™.

## Hotwork Div of Fosbel, Inc.

#744

<http://www.hotwork.com>

Lexington, Kentucky

Hotwork services provide quality refractory heating that reduce the risk of premature refractory failure. Convective heating and precise temperature control from ambient to operating temperature allow uniform drying and the reduction of internal stress. Hotwork innovations include *HotTec*, a new heating system that is processor controlled and remotely attended. Hotwork is continually offering innovations like *HotTec*, to meet increasing customer demands for improved heating control.

For more information, visit us at booth #744 or contact us at:

Hotwork  
223 Gold Rush Road  
Lexington, KY 40503  
Phone: 859-276-1570  
Fax: 859-276-1583

## Hydro Aluminium Hycast a.s.

#423

Sunnalsóra, Norway

The Hycast division of Hydro Aluminium is located nearby the Sunndal plant in Norway. In addition to the main office, Hycast has a US office in Louisville and are also working closely together with other Hydro offices world wide. Hycast is responsible for important activity of Hydro, and is ca-

pable of supplying the aluminum industry with the following equipment:

1. Hycast Melt Refining Systems;
2. Hycast RAM (removal of alkaline metal) Systems; and
3. Hycast Billet Casting Gas-Cushion System

In addition to being an equipment supplier, Hycast has high competence in all aluminum casthouse processes, by having skilled personnel in metallurgy, casthouse operation, engineering and automation. Choose Hycast as your technology partner for better operation and profitability.

## **Hysitron Inc**

**#546**

<http://www.hysitron.com/>  
Minneapolis, Minnesota

**Hysitron Incorporated is committed to producing, servicing, and designing the world's leading nanomechanical test equipment.**

Hysitron, Inc. manufactures nanomechanical testing instruments especially tailored to measure hardness, elastic modulus, friction, wear resistance, fatigue, nanoscratch and indentation. The TriboScope® and TriboIndenter® offer the unique ability to perform quantitative nanoindentation and nanoscratch testing independently or with in-situ scanning probe microscopy imaging.

## **I**

## **IOM Communications Ltd.**

**#639**

<http://www.instmat.co.uk/>  
London, United Kingdom

## **Industrial Heating Magazine**

**#350**

<http://www.industrialheating.com>  
Pittsburgh, Pennsylvania

Industrial Heating is the leading thermal processing journal in the world. Celebrating 70 years as the industry's largest and most preferred publication, Industrial Heating has over 22,100 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.

## **IMS Ltd.**

**#950**

Southport, United Kingdom

## **Innovatherm Company**

**#835**

Butzbach Germany  
Tel: 0049-6033-9696-0  
Fax: 0049-6033-9696-9  
e-mail: [innovatherm@t-online.de](mailto:innovatherm@t-online.de)

Innovatherm Prof. Dr. Leisenberg GmbH&Co. KG is concerned with thermal processes and has specialised 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.

## **J**

## **Jayne Industries Inc.**

**#834**

[www.jayneindustries.com](http://www.jayneindustries.com)  
Stoney Creek, Ontario, Canada

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 & services to the Aluminum, and other Non Ferrous and Ferrous Industries for over 30 years.

Hexmesh and accessories as well as Jayne large volume Refractory Pan & 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 #834 to further discuss your anchor and hardware requirements.

## **Jervis B Webb Co.**

**#212**

Farmington Hills, Michigan

Jervis B. Webb Company is a recognized leader in the field of engineered material handling systems and equipment. Our high-volume bulk conveyors bring mined ores from the mine-mouth to the aluminum refinery, using overland transport belt conveyors, automatic ship loaders and unloaders, bucket elevators, and screw conveyors.

In the smelting plant, our full line of power and free conveyors and integrated material handling products are computer controlled to efficiently automate rod/anode assembly, and green or baked anode operations.

### **Our product line includes:**

- automated guided vehicles
- power and free conveyors
- roller and heavy-duty chain conveyors, automated storage and retrieval systems

- and custom designed automation equipment for butt removal and anode or slab handling

From raw materials handling and transport . . . to anode, molten metal, and cast ingot handling . . . to automated storage of work-in-process and finished product . . . The Jervis B. Webb Company has over 40 years of material handling and control experience in the Aluminum Industry.

## **Johnston-Vermette**

**#547**

<http://www.johnston-vermette.com>  
Cap-de-la-Madeleine, Quebec, Canada

Johnston-Vermette is a firm of consultant engineers well organised to provide full services in engineering, procurement, project construction and management. One of our strengths is doing specialised machines on a design-build basis.

There are some eighty engineers and technicians in our group, each with hands-on experience in plants with severe operating conditions, particularly for aluminum and magnesium smelters.

Our multidisciplinary team (mechanical, process, electrical, automation and civil engineering) offers services at different stages of a project:

- Feasibility studies
- Preliminary and detailed engineering
- Project definition
- Detailed design
- EPCM
- Construction
- Start-up
- Modifications

Our employees are recognized for two characteristics: quality and communications.

## **K**

## **Kabert Industries**

**#716**

<http://www.kabert.com>  
Villa Park, Illinois

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 at our plant in Lynn, Indiana. Plain, leno and twill weave cloth styles are woven to specification. Three, four or six strand yarn costs are available.

Also at our Lynn facility, the cloth is cut and sewn into a variety of mini channel bags, trough socks and many other shapes. Other products available include gaskets, vacuum formed shapes, and ceramic foam filters.



## **KB Alloys Inc**

**#817**

<http://www.kballoys.com>  
Reading, Pennsylvania

KBALloys, Inc. and Anglo Blackwells Ltd. produce 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, ingot and KORRECT BAR®. With the use of statistical process control, KBALloys 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.

This traditional quality system is now even stronger with certification of all our facilities to ISO 9002 standard by the British Standard Institute. If consistency in product performance is important to your success, selecting KBALloys or Anglo Blackwells as a vendor is your critical path to success. Our technical specialists and field sales engineers can assist you in creating the best master alloy for your needs, increasing your production, solving problems and improving the performance of your aluminum alloys. Please see us at our booth or contact us at [www.kballoys.com](http://www.kballoys.com)

## **KBM Affilips B.V.**

**#909**

<http://www.kbmaffilips.com>  
Oss, The Netherlands

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 Aluminium industry include AlTiB, AlTiC, AlB, AlSr as well as a full range of hardeners, tablets and briquettes (a.o. Cr, Fe, Mn & Ti). The very complete product range for the Copper industry includes products like CuB, CuCo, CuCr, CuFe, CuMg, CuSi, CuTi & CuZr. KBMAFFILIPS is also the right address for NiMg (& complex FeNiMg), additives for super alloy production as well as Pb and Zn master alloys.

For further information please visit our booth 909 or contact us at:  
Tel. : + 31 - 412 - 681311  
Fax. : + 31 - 412 - 635594  
E-mail: [info@kbmaffilips.com](mailto:info@kbmaffilips.com)

## **Kempe International**

**#724**

<http://www.kempe.com.au>  
Geelong, VIC, Australia

Kempe International is a leading global engineering service-based company providing turnkey facilities, specialised equipment, engineering consulting and maintenance support services to the aluminium smelting industry.

Kempe's services can be offered independently or as a package and include:

- Engineering Design & Project Management
- Manufacturing
- Equipment Supply
- Turnkey Project Work
- Site Project & Shutdown Coordination
- Maintenance Engineering
- Fluid Power Supply & Services

Our commitment to customer service is supported by an ever growing in-house branch network on a global basis.

Our clients include smelters in Australia, New Zealand, U.S.A., Brazil, South Africa, Mozambique and Dubai.

## **Keops Technologies Inc**

**#239**

Montreal, Quebec, Canada

KEOPS will showcase its focus on delivering leading edge end-to-end manufacturing Information Technology solutions to the aluminium industry.

KEOPS has amassed in-depth expertise for elaborating and implementing Plant Information Management Systems and Real-Time Systems for all sectors of a typical Aluminium Smelter or Rolling operation. These systems have increased the efficiency of a plant and are ensuring an excellent long-term return on investment.

The KEOPS methodology has been developed over the past decade and has proven to be tremendously successful for our clients. The methodology ranges from feasibility studies, detailed reports, all phases of design, elaboration and implementation of an aluminium plant project.

## **KHD Humboldt Wedag AG**

**#337**

<http://www.humboldt-wedag.de>  
Cologne, Germany

KHD Humboldt Wedag AG has its main fields of activities in the design and construction of plants for the base materials industries, such as cement production, minerals processing, coal preparation and aluminium smelting.

For the aluminium industry, KHD Humboldt Wedag AG designs, supplies and installs:

- bauxite crushing and grinding systems
- green anode plants
- anode handling systems
- rodding plants
- butts crushing plants
- pot line equipment

and is the world-leading supplier of vibrating compactors for forming of green anodes, cathode blocks and electrodes, with more than eighty units supplied to the aluminium and carbon products industries.

For more information please visit us at: [www.humboldt-wedag.de](http://www.humboldt-wedag.de)

## **Kluwer Academic Publishers**

**#343**

Norwell, Maine

Visit KLUWER ACADEMIC/PLENUM PUBLISHERS Booth No. 343 to browse the latest books and journals in Materials Science. Included are:

- Peters/HANDBOOK OF COMPOSITES, SECOND EDITION;
- Marshall/ENCYCLOPEDIA OF GEOCHEMISTRY;
- Sheppard/EXTRUSION OF ALUMINUM ALLOYS;
- Nicholas/JOINING PROCESSES;
- Kaye/POWDER MIXING;
- Hussey/LIGHT ALLOYS
- DIRECTORY AND DATABOOK and others. . .

## **Kumera Technology Center**

**#943**

[http://www.kumera.com/index\\_main.html](http://www.kumera.com/index_main.html)  
Riihimaki, Finland

Kumera Technology Center serves aluminium, copper, and nickel smelters as well as metallurgical and mining industries generally, supplying main process equipment and process modernization services.

In addition to supply of equipment, Kumera Technology Center acts as an independent consultant and has prepared several project documentations, Feasibility Studies and Evaluation Reports within primary aluminium and alumina refining industries.

Kumera is also a major producer of mechanical power transmissions. The range of solutions covers practically all industrial applications. For aluminium smelters, the special application of Anode Jacking Systems is available for most of the pot technologies.

## Kvaerner Process Technology AG

#435

<http://www.kvaerner.com>  
Pratteln, Switzerland

Since Kvaerner acquired Buss CPS AG, it has since been known as Kvaerner Process Technology (Switzerland) AG or KPT and is still regarded as 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.

Efficient processing of anode paste using mixing energy in the range of 7 to 10 kWh per ton of paste is vital for the economic production of anodes, being suitable for the high amperage smelting technology. The continuously operating Buss Kneader guarantees uniform paste quality for trouble free anode forming and baking and for smooth operation of the pot rooms.

Over 200 Buss Kneaders, with capacities up to 50 tonne/h in single units, are in operation worldwide. Our unsurpassed services include the supply of genuine spare parts from stock and revamping or upgrading of existing installations.

Additionally we are supplying complete paste plants and as well as our own technology and proprietary equipment for the continuous pitch melting and manufacture of aluminium fluoride.

## L

## Light Metal Age

#718

<http://www.lightmetalage.com>  
San Francisco, California

For almost 60 years, *Light Metal Age* magazine 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.

## LMI Selcom

#207

<http://www.lmint.com/cfm/index.cfm>  
Southfield, Michigan

### LaserPour® Molten Metal Level Control Solutions

The LaserPour® Aluminum Level Control Systems from LMI Selcom are high-speed, closed-loop control systems that automatically and precisely regulate the level of molten metal in a mold, launder, headbox or tundish.

Using real-time level measurements, the systems control the metal level from start-up through the finishing stage to finished casting. Metal flow from the tilting or stationary furnace is also controlled to assure accurate and consistent fill rate to the desired level.

LMI Selcom's products for aluminum level control provides automatic, easy-to-use, reliable and virtually maintenance free solutions and they offer proven benefits to the customer.

## LOI Inc

#835

<http://www.loi.de/en/indexsa.html>  
Canonsburg, Pennsylvania

LOI, Inc. features the Twin-Chamber melting furnace, for melting contaminated aluminum scrap without using salt. This process is based on low-temperature carbonization and subsequent incineration of the contaminants, making it an environmentally compatible solution.

### Aluminum Melting

Delivery of complete systems for melting/recycling of various Al materials and scrap, including flue gas purification, metal circulation using electromagnetic pumping, and charging equipment.

Design and manufacture of:

- Round, top charge, melting furnaces
- Tilting, holding furnaces
- Twin-chamber melting furnace for contaminated scrap

### Heat Treatment

Heat treatment systems for structural Al parts (wheels, cylinder heads, axle guides, etc.) for continuous and non-continuous operation, for the following processes:

- Solution annealing
- Quenching
- Artificial aging

Artificial aging systems for extruded Al profiles  
Coil Annealing systems for single or multiple coils

## Loma Machine Mfg. Co.

#822

New Rochelle, New York

The state of the art billet casting operation has been designed and built by LOMA Machine of New York. Our "Easycast" Hot Top System of aluminum was developed for the production of aluminum alloy extrusion billets. The unit is based on a closed Mold System patented, and simultaneous casting as many as over 100 multiple strands can be cast in one set-up. Less than 1 percent of the metal is lost in the form of "gate" on top of the billet, which is a great improvement compared to the scrap loss involved in conventionally cast billet.

Contact Loma by Fax at 914/636-0344  
Visit us at Booth #822

## London & Scandinavian Metallurgical

#411

[www.lsm.co.uk](http://www.lsm.co.uk) & [www.metallurg.com](http://www.metallurg.com)  
London, England &  
Rotherham, England

London & Scandinavian Metallurgical Co Limited (LSM), a member of the Metallurg Aluminium Group, seeks to provide Quality, Service and Technology to aluminium cast houses worldwide, with a comprehensive range of specialized aluminium grain refiners, master alloys and compacted powder products.

LSM's recent £5 million investment in a new TiBAl rod mill will meet growing world demand with consistent quality, increased efficiency, and enhanced customer service. This investment, along with the acquisition of Hydrelco AS Norway in March 2000, demonstrates our total commitment to serving the global aluminium community.

LSM achieved QS9000 in February 2000, making them the world's first producer of grain refiners, master alloys and compacted additives to achieve this accreditation.

We invite you to stop by the new Metallurg Aluminium Group booth for the latest information on our products and services and how they can be used in your applications.

## LVE Verfahrenselektronik GmbH

#835

<http://www.lve-gmbh.de>  
Essen, Germany  
Tel: 0049-201-26692-0  
Fax: 0049-201-26692-20  
e-mail: [maiwald@lve-gmbh.de](mailto:maiwald@lve-gmbh.de)

LVE is specialised in the automation and optimization of thermal processes for the aluminum industry. Special knowledge and experiences are available in anode baking and casting technology. Products are **ProBake** advanced firing systems for anode baking furnaces and **CMMS**, an optimized charging calculation and melting management system for primary and secondary casthouses.

## M

## maerz-gautschi Industrial Furnaces

#311

<http://www.maerz-gautschi.ch>  
Tägerwilten, Switzerland

maerz-gautschi Industrial Furnaces / Aluminium Division in Tägerwilten, Switzerland, offers, as a result of the extensive experience gained in the aluminium industry world-wide, thoroughly developed and proven products ranging from individual items of equipment to complete casthouses.

Melting and Holding Furnaces for casting directly from smelter reduction cells or integrated in remelt lines; Ingot Casting and Stacking Machines for foundry ingots, Horizontal and Vertical Casting Machines for rolling slabs and extrusion billets to produce the universal feedstock for remelt, rolled and extruded products; Heat Treatment Furnaces - batch or continuous type - for further treatment are the main products of the company.

Collaboration with Technical Institutes, experienced companies such as HPI, SAG, VAW and ongoing relationships with our customers creates the inspiration for a prosperous future. maerzgautsch's use of the latest technology provides the aluminium industry with efficient installations according to latest standards.

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## MagChem Inc

#124

<http://www.magchem.com/>

Boucherville, Quebec, Canada

### Specialized Casting and Sawing Lubricants

MagChem Inc. is a leader manufacturer and designer of high tech casting and sawing lubricants.

MagChem **casting** lubricants have been developed to provide the following properties:

- High flash point, low smoke formulations
- Ecological acceptance in the DC process
- High thermal stability.
- Low volatility.
- High lubricity
- Stable lubricant film at the molten metal-mold interface.
- Low oxidation properties at high temperatures.

MagChem **sawing** lubricants are critical to ensure the integrity of the surface and the quality of the cut. High heat extraction properties, elimination of staining in heat treat stages and high lubrication values are distinct advantages provided by MagChem sawing lubricants. These lubricants are formulated with anti-oxidation and lubrication additives.

MagChem has also developed a full line of quality products for aluminum wire drawing and strip rolling.

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## Master Alloys Co.

#915

Munster, Indiana

Master Alloys will be exhibiting its popular 100% canned hardeners. The canned hardener is 100% element in a pre-weighed, moisture-proof aluminum can. The element is not released into the aluminum until it is under the melt which negates any oxidation and results in very high recoveries.

This unique way to alloy aluminum has many advantages over other forms of hardeners. Besides being pre-weighed and moisture proof as stated above, the product is easy to store; re-

duces inventory; easy to use; fast dissolution; high recoveries; free from contamination; and guaranteed composition.

In addition to the can hardeners, Master Alloys supplies grain refiners and specialty alloys to the aluminum industry.

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## Allied Mineral Products Inc/ Matrix Refractories Division

#743

<http://www.alliedmatrix.com/>

Columbus, Ohio

Matrix Refractories Division, Allied Mineral Products, Inc. is a manufacturer of high quality, high technology monolithic refractories designed specifically for the aluminum industry. We provide some of the most advanced and cost effective refractories for the aluminum melting, holding, transfer, and related equipment. We utilize a direct sales force and a distributor network to market our products throughout the United States and the world.

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## McAllister Mills, Inc.

#824

<http://www.mcallisttermills.com>

Independence, Virginia

McAllister Mills is a world class producer of thermal barrier products. Today, McAllister Mills serves the thermal insulation market with over 1300 off the shelf woven and non-woven products. Our new non-woven family of products is ideally suited for the temperatures and applications seen in the non-ferrous industries. All of our products are produced from thermally efficient raw materials including, E-Glass, M.H.T. Glass, Silica, and bio-soluble vitreous silicate fiber.

Whether you need gasket material for the furnace or engineered systems for your pot line or soaking pit, McAllister Mills will be there to supply a quality product you can count on.

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## Mechatherm International Ltd

#637

<http://www.mechatherm.co.uk>

Kingswinford West Midlands

United Kingdom

Mechatherm is a privately owned company, formed in 1973 and has developed a worldwide reputation specialising in furnaces for the aluminium, copper and brass industries. The product range can be split into 4 main categories:-

**Aluminium Foundry** - melting and holding, rotary (static and tilting), scrap charging machines, vertical d.c. casting machines, turnkey foundry installations including all necessary ancillary items

**Aluminium Extrusion** - including log heaters and shears, ageing ovens, automatic ageing oven basket handling systems and die ovens

**Aluminium Heat treatment** - all air recirculated types of furnaces including homogenising, coil annealing, foil annealing, slab heating and solution heat treatment

**Aluminium Dross reclamation** - joint venture with Jesse Brough Metals, custom designed to suit the type of dross to be recycled. The full range of dross recycling plant includes refining and separation into useable products and remelting of aluminium metallica.

**Copper and Brass Extrusion** - gas fired billet heating furnaces both roller hearth and walking beam type.

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## Megaquip Ind Ltd

#238

<http://www.megaquip.com/>

Email: [sales@megaquip.com](mailto:sales@megaquip.com)

Delta, British Columbia, Canada

MEGAQUIP INDUSTRIES LTD. specializes in the design and manufacture of unique heavy duty mobile and industrial equipment utilized in Aluminium Smelters and other industries.

- Our reputation as a "Key Supplier - Partner", highlights our corporate strengths -
- The ability to define both the task and the required solution.
- The willingness to do whatever is needed for any particular design requirement.

After developing some 49 proto-types, we still hold a 100% success rate.

If you expect satisfaction through value analysis and project teams, we can assure your success - MEGAQUIP - part of your team!!!!

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## Metal Bulletin LLC

#734

<http://www.metalbulletin.com>

London, United Kingdom

For more than 80 years, Metal Bulletin has been reaching metals producers, semi-fabricators, traders, end users, recyclers and capital equipment suppliers in more than 100 countries. Metal Bulletin and its sister publication, Metal Bulletin Monthly, are more widely known and respected in the international metals markets than any other metals publications. In addition to MB and MBM, Metal Bulletin Journals publishes numerous research reports, directories and databooks for every segment of the ferrous and non-ferrous metals industries. Metal Bulletin also arranges metals conferences throughout the world and provides an on-line metals information service, [www.metalbulletin.com](http://www.metalbulletin.com).

## Metallurg Aluminium

#411

Burlington, Ontario, Canada

[www.metallurg.com](http://www.metallurg.com)

& [www.lsm.co.uk](http://www.lsm.co.uk)

Rotherham - UK, Newfield - NJ,

São João Del Rei - Brazil,

Rjukan - Norway, Munguia - Spain

Metallurg Aluminium combines the strengths of its five members, London & Scandinavian Metallurgical Co Limited (LSM), Shieldalloy Metallurgical Corporation (SMC), Companhia Industrial Fluminense (CIF), Hydrelko AS and Bostlan SA to innovatively meet the highest quality requirements of the aluminium industry.

With its five manufacturing facilities, located in the UK, USA, Brazil, Norway and Spain, its professional worldwide sales force and global distribution network, Metallurg Aluminium offers the aluminium industry the highest level of service in the supply of aluminium grain refiners, master alloys and hardeners.

Our wide range of compacted powder products includes Chrome, Copper, Iron, Manganese, Nickel and Titanium in our flagship ALTAB™ products and briquettes.

We continuously provide innovative products aimed at reducing costs in the cast house. Recent innovations include TiCAI 315™ & TiCAI 330™ grain refining rods, 8% Boron Al (8BAI™) rod & castcut™, Sr-Al & TiBAI Quicksol Bar™, Strobloy™, TiBAI™ and ALTAB™ 100% Ti.

Consistently high quality is secured through statistical process control and rigorous quality assurance programs. All Group members are registered to one or more of the following quality standards: QS 9000, ISO 9001, or ISO 9002.

We invite you to visit the new Metallurg Aluminium booth for the latest information on our products and services and how they can be used in your applications to improve yields and lower costs.

## Metallurgical Society Of CIM

#125

3400 de Maisonneuve W. #1210

Montreal, QC H3Z 3B8 CANADA

Phone: (514) 939-2710

Fax: (514) 939-9160

The Metallurgical Society (MetSoc) of the Canadian Institute of Mining, Metallurgy and Petroleum was formed in 1967 under the umbrella of CIM to serve the needs of all Canadian Metallurgists working to transform ores to metals and other useful commercial products. MetSoc, 1,700 strong, provides an open 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 its members who are engaged in all phases of the minerals, metals and materials industry.

To enhance the exchange of information MetSoc publishes a number of proceedings that touch a number of topics including:

- Hydrometallurgy of non-ferrous metals
- Light metals
- Pyrometallurgical operations, covering the smelting of sulphides and laterites
- Iron and steel developments
- Technology of zinc and lead processing
- Waste processing and environment issues
- Computer applications
- Mineral processing

MetSoc would like to take this opportunity to invite you to visit Booth 125. See you in New Orleans!

## Metaulics Systems Co. L.P.

#511

[www.metaulics.com](http://www.metaulics.com)

Solon, Ohio

Metaulics Systems is a leading supplier of equipment for handling and processing non-ferrous molten metals. Metaulics manufactures a complete line of molten metal pumps for circulating and degassing aluminum in reverberatory furnaces and transfer pumps for controlled, safe metal transfer. Metaulics is a leader in the field of re-usable molten metal filters, machined oxidation resistant graphite, and scrap submergence systems. Metaulics' state-of-the-art L-Series pumps will be displayed during the 2001 Exhibition. Metaulics will also display its revolutionary Low Turbulence Scrap Submergence (LOTUSS®) melting system. See us at booth 511 and visit our web site at [www.metaulics.com](http://www.metaulics.com).

## Mid-Mountain Materials

#642

[www.mid-mountain.com](http://www.mid-mountain.com)

Seattle, Washington

Mid-Mountain Materials Inc. is an international company specializing in the manufacture of advanced high temperature resistant industrial textiles, coated fabrics, custom sewn parts and technical insulation. With the changing needs in the late seventies to replace asbestos bearing products, Mid-Mountain materials has been proud to offer our line of Quartex™ ("Q") refractory textiles. It's high resistance to a variety of chemicals, low porosity, excellent abrasion resistance, high temperature resistance and general high strength make "Q" one of the toughest textile products in the world.

We at Mid-Mountain welcome the opportunity to work with your engineers, purchasing staff and other plant personnel to find better ways to protect your people, your equipment and our environment.

Contact us at: Telephone: 1-800-382-2208

## Milward Alloys, Inc.

#913

<http://www.milward.com>

Lockport, New York

Milward Alloys, Inc. was founded in 1948 and continues today as a major supplier of copper and aluminum based master alloys. Included among these are a variety of grain refiners, modifiers, hardeners and degasifiers produced for the primary and secondary aluminum industry, as well as brass mills, tube mills and brazing rod manufacturers.

Our 15% strontium aluminum rod continues to be a unique product in the industry. In addition to the standard titanium boron grain refiners, Milward offers a number of titanium carbon alloys for special applications. For more information contact us at [www.milward.com](http://www.milward.com).

## Minteq International Inc.

#745

[www.mineralstech.com](http://www.mineralstech.com)

Slippery Rock, Pennsylvania

**MINTEQ International Inc.** is one of the world's largest producers of monolithic and specialty refractory materials for the steel, cement, glass, and non-ferrous metals industries. **MINTEQ** is a resource and technology based company with R&D facilities in five locations around the globe.

One of our newest product lines is the proprietary **STARFLOW** family of products. **STARFLOW** products were developed for high temperature maintenance and repair of melting and holding furnaces, troughs, ladles, and molten metal containing vessels. **STARFLOW** products provide the following benefits:

- Furnished as a dry product that requires no addition of water
- No mixing required
- No dusting during application ( safe, environment friendly application )
- Contains no pitch or other organic additives
- Wets out and flows upon exposure to heat
- Sets up within minutes
- Eliminates furnace shut down
- Eliminates costly downtime for maintenance and repair

Stop by our booth at the TMS in New Orleans for a **STARFLOW** demonstration!

## Moeller Electric GmbH

#339

<http://www.moeller.net>

Bonn, Germany

Klöckner-Moeller is the competent contact for power management and automation, with almost 7,000 committed employees, 23 production plants and 350 sales offices around the world. Klöckner-Moeller develops, produces and markets LV

switchgear and products, and power distribution. With our broad product range of over 35,000 individual types, we rank among the top suppliers in the electrical industry offering everything from transformers to a complete range of contactors, to circuit-breakers and the latest generation compact programmable control system. Also, our range of distribution equipment, including distribution boards and busbar trunking distribution systems, is the most comprehensive available in the European market to date. Thus, from individual components to complete plant systems, Klöckner-Moeller has the answer to virtually any customer requirement

## **Moltech**

**#736**

Carouge, Geneva, Switzerland

### **MOLTECH Products for Aluminum Cells**

In over twenty years of research, the MOLTECH Group has developed products and processes for aluminum electrowinning, including TINOR Aluminum-wettable Protective Cathode Coating, OPANOR Anode Oxidation Protection and EXCELNOR Side Wall Oxidation Protection, which have been tested extensively in laboratories and commercial Cells and are now available for commercial use.

The ultimate goal of MOLTECH research is the development of the NOVANOR non-carbon non-consumable anode to replace carbon anodes, thereby improving Cell performance, reducing pollution in their fabrication and use, and in residue disposal.

NOVANOR anode laboratory test results are very promising and pilot scale tests are now in process. MOLTECH invites everyone to visit its stand at TMS, which will feature innovative MOLTECH products including NOVANOR.

## **Molten Metal Equipment Innovations**

**#119**

<http://www.mmei-inc.com>  
Middlefield, Ohio

Molten Metal Equipment Innovations, Inc. is a dynamic and innovative company that designs and manufactures people-friendly equipment for the aluminum industry. Products include molten metal circulation, transfer and gas injection pumps, scrap melting systems and rotary degassers. We specialize in the ability to customize any of our products to meet our customers' unique needs. MMEI invests heavily into engineering, upgrading of existing equipment and new products. We are fully staffed to offer a variety of services to our customers. This includes on-site installation and start-up of the initial equipment. Contact us at 440-632-9119 and our web site at [www.mmei-inc.com](http://www.mmei-inc.com).

## **Murlin Chemical Inc**

**#719**

[www.murlinchemical.com](http://www.murlinchemical.com)  
West Conshohocken, Pennsylvania

Murlin Chemical, Inc. manufactures both natural and synthetic bone ash at its plant in West Conshohocken, PA, U.S.A.. These products are supplied to the world wide non-ferrous metals industry.

Aluminum Grade Natural Bone Ash is accepted by the Aluminum Industry as the premier release agent. Application of bone ash to a mold, a refractory trough, a surface, or a tool, which will be exposed to molten aluminum provides a consistent barrier against attack by the molten metal. Quick release of a casting or any solid metal, which may cling to the exposed surface, is a major benefit.

Plan to visit us at booth 713 to learn more about the advantages gained by using bone ash in your foundry.

You may contact us any time at (phone) 610-825-1165, (fax) 610-825-8659, e-mail at [general@murlinchemical.com](mailto:general@murlinchemical.com) or visit our web page at [www.murlinchemical.com](http://www.murlinchemical.com).

**N**

## **Nalco Chemical Co**

**#701**

[www.nalco.com/](http://www.nalco.com/)  
One Nalco Center  
Naperville, Illinois 60563-1198

Nalco's newest offering, Nalco Industrial Outsourcing (NIO), can design, build, finance our ownership or acquisition, operate and maintain almost any water, energy and waste applications in your plant. Nalco also provides the same conventional water treatment programs and services that have improved the operating efficiency and productivity of facilities around the world.

Nalco's treatment of water from influent to effluent is now complemented with surface treatment technology for cleaning and finishing. Nalco has the unique ability to evaluate the quenchability of your water on your plant site. Quenchability can have a significant impact on issues like yield, product quality and roll life.

## **National Refractories & Minerals Corp.**

**#222**

<http://www.nrmc.com>  
Columbiana, Ohio

National Refractories & Minerals Corp. will be featuring the following products at the 130<sup>th</sup> TMS Conference in New Orleans:

- KRIAL 47A a unique formulation that is ideally suited for the flue and headwall shapes in carbon baking furnaces. The product has been tailored in such a way as to maximize its resistance to silica depletion and creep.
- SC-99108 XR a unique 85% alumina low cement castable that has strengths superior to nitride bonded silicon carbide brick. SC-99108 XR finally gives the customer a true brick in a bag!
- FUSION a unique fused silica technology that is taking the industry by storm in such areas as; troughs, filter bowls, ladle linings, port blocks, impellor blades, stopper rods, etc...

## **Niton Corporation**

**#447**

<http://www.niton.com>  
Billerica, Maine

NITON® Corporation, headquartered in Billerica, MA, specializes in non-destructive alloy analysis instrumentation.

NITON's XL-800 Series x-ray fluorescence (XRF) alloy analyzer was the best-selling portable alloy analyzer of 1999. At just 2 1/2 lbs., the XL-800 is the only truly hand-held high-performance alloy analyzer in the world. It is the ideal choice for fast nondestructive analysis and rapid grade identification of ferrous, nonferrous and high-temp alloys.

The new PMI-Master portable Arc/Spark spectrometer provides near lab-quality analysis of carbon as well as other alloying elements and trace contaminants in metal alloys. The PMI-Master is ideal for analysis of carbon steels, L-grade stainless steels, aluminum alloys and more.

## **NKM**

**#442**

Rotterdam, Holland

### **NKM and the Aluminium Industry**

NKM products have found their way around the world since 1933. Ore transport installations exported to Beire, floating cranes to India and Turkey, custom designed loading- and transport installations to New Zealand, India, Hong Kong and Portugal, salt reclaimers to the United States, concrete loaders to Venezuela and since 1963 specially designed cranes and machines for aluminium reduction plants. Hundreds of these cranes and machines have now been installed worldwide.

Over the years, NKM has constantly upgraded and improved its equipment for the aluminium industry. Besides crane transfer systems NKM supplies the aluminium industry with cathode cranes, baking furnace cranes, pot tending cranes, jacking frames, anode stacking cranes, crucible cleaning machines, pipe cleaning machines, pre-heaters and refractory heaters, billet handling cranes and casthouse cranes.

See us at booth 442, or phone or fax NKM in Holland: tel. +31 10 4873462 fax +31 10 4873478

## Noell Crane & Service Inc

#545

<http://www.noellcrane.com>

Herndon, Virginia

### Products

- Pot Tending Cranes
- Cathode Removal Cranes
- General Purpose Cranes
- Crane Transfer Gantries
- Anode Jacking Frames
- Anode Clamps and J-hooks
- Roof filling Spouts
- Retractable Bumpers
- Crane Runway Sectional Raising Beams
- Carbon Baking Furnace Tending Cranes

### Services

- Field Erection Supervision and Commissioning
- Lump Sum Field Erection and Commissioning
- Maintenance Contracts

## North American Manufacturing

#634

<http://www.namfg.com>

Cleveland, Ohio

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 where applicable.

North American has been providing systems for the aluminum industry for better than forty years, specializing in energy savings and melt rate optimization.



## Oak Ridge National Lab

#908

[www.ornl.gov](http://www.ornl.gov)

Oak Ridge, Tennessee

ORNL is a multi-program science and technology laboratory managed for the U.S. Department of Energy by UT-Battelle, LLC. Scientists and engineers at ORNL conduct basic and applied research and development to create scientific knowledge and technological solutions that strengthen the nation's leadership in key areas of science; increase the availability of clean, abundant energy; restore and protect the environment; and contribute to national security.

**Basic Energy Sciences:** The DOE-ER Office of Basic Energy Sciences supports a broad spectrum of research in the physical sciences at ORNL through its Materials Sciences, Chemical Sciences, and Engineering and Geosciences divisions.

The Materials Sciences subprogram supports fundamental materials R&D including neutron scattering; synthesis and characterization of new materials; high-temperature materials; ceramic processing; superconductivity; surfaces and thin films; synchrotron research; ion beam, laser, and plasma processing; and theoretical studies for advanced energy-related materials. This program also supports four user programs:

- Surface Modification and Characterization Research Center
- Neutron Scattering Research Facilities at the HFIR

Two programs co-sponsored by ORNL and the Oak Ridge Institute for Science and Education:

- ORNL-ORISE Synchrotron Organization for Advanced Research
- Shared Research Equipment Program

## Opsis

#123

<http://www.opsis.se>

San Marcos, California

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 reliable system solutions for a number of applications. All systems feature dynamic calibration capability and simple hardware configurations. The ambient system is an EPA approved equivalent method for SO<sub>2</sub>, NO<sub>2</sub> and O<sub>3</sub>.

Other Opsis benefits include complete DOAS system packages, fully automatic monitoring systems, multi gas and multi path systems, fast, continuous measurements, modular construction which allows expanding or updating of existing installations and simple report generations.

Applications for Opsis equipment include Trend Monitoring, Air Quality Monitoring at street level, Fence Line Monitoring of fugitive emissions, Monitoring Background Levels, Measurement of Aircraft emissions, Waste Incinerations, Power Plants, Mineral Wool Production, Cement Industry, Chemical Industries, Sulfuric Acid Production, Fertilizer Production and Aluminum Smelters.

P

## PcO Raadts

#543

[www.pco-raadts.de](http://www.pco-raadts.de)

Rees, Germany

Tel. (Germany ) +49 - 2851-2763

Fax. +49 - 2851-2784

e-mail: [pco-raadts@t-online.de](mailto:pco-raadts@t-online.de)

PCO - Purging COntrol systems

PCO is:

- excellent for operations such as pre-melting, melting, fluxing, cleaning, temperature equalising, homogenisation and auto bursting
- simple to operate, manually or automatically
- controls every consumer (porous plug, impeller, lance pipe) individually, irrelevant of their numbers
- guarantees a homogeneous and constant flow rate (volume and time), independent of any variation in back-pressure of each consumer
- operates through predetermined and pre-selected programs with regard to flow rate, time and production process
- allows individual flow rate for any individual consumer at the same time
- automatically sets free a by-pass operation in order to blow-free any afflicted individual consumer after P-Max has been reached (as a result of a clogging )
- shuts down without delay and automatically when chlorine alarm has been set by chlorine detector
- flushes automatically the total system free of any residual mixed Cl / N or Ar gas in the case of an emergency
- an almost maintenance free system
- possesses redundant and built in alarm systems
- guarantees highest safety for its users
- a very robust, long life built product
- reduces tab - to - tab - time
- a highly efficient and reliable product at a reasonable price

## Parker-Hannifin

#925

Des Plaines, Illinois

## Pechiney Corporation

#707

Mamaroneck, New York

With an annual alumina production of nearly 2 Mt. and aluminium production of 1 Mt., Pechiney is one of the major producers.

The Aluminium Pechiney Technology has always been very innovative and has set many records, particularly for power consumption, cathode performances and environmental protection (more than 2800 AP 18 cells and 2,000 AP-30 cells are operated around the world).

Pechiney Aluminium Engineering markets the Pechiney Group's Technologies for casthouse equipment. They are specialists in the areas of degassing and filtration, including its recently improved Alpur TS system, automatic DC casters and continuous strip casters using the Jumbo 3C process. They are also suppliers of technical assistance in the manufacture of flat-rolled aluminium products, for rolling and finishing or basic engineering, and operating know-how for turn key plants.

## **Plibrico Company**

**#229**

Chicago, Illinois

Plibrico Company celebrates its 85th 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, gunniting, 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.

## **Port of Longview**

**#836**

[www.portoflongview.com](http://www.portoflongview.com)  
Longview, Washington

Port of Longview is a deep water port authority with full-service bulk and breakbulk terminal facilities and a 300-acre industrial park on the Columbia River.

**Port Facilities:** The Port of Longview's import and export terminal facilities on the Columbia River in Washington state are capable of handling your bulk and breakbulk moves to and from the Pacific Northwest. Longview specializes in bulk handling with an emphasis on chemicals, minerals and fertilizers and breakbulk commodities such as steel.

**Industrial Park:** The Port's 300-acre industrial park is a great site for expanding iron, aluminum and steel manufacturers and processors requiring excellent transportation connections. Dual rail service and tax advantages in General Purpose Foreign Trade Zone #120 offer companies a competitive edge.

**Contact:** For more information, stop by our booth #836 or call (360) 425-3305.

## **Precimeter, Inc.**

**#422**

<http://www.precimeter.com>  
Birmingham, Michigan

Precimeter's business idea is to be the leading manufacturer of non-contact measurement and control products for industrial applications with the highest total customer value. This will be achieved through quality, reliability and service mindedness.

## **Precision Inc.**

**#923**

Sisterville, West Virginia

THE PRIMARY ALUMINUM INDUSTRY'S  
MOST REMARKABLE SUPPLIER.

Precision, Inc. is a 40-year old supplier of quality goods and services to the primary aluminum smelting industry.

- Electrical Bus
- Copper Fabrication
- Aluminum Fabrication
- Steel Fabrication
- Design
- Material Handling & Logistics Support
- Dross Processing

## **Procedair Industries / FCB Aluminum**

**#417**

[www.procedair.com/](http://www.procedair.com/)  
Montreal, Quebec, Canada

Supported by the experience of over 120 installations worldwide in the aluminum industry, PROCDAIR provides technical and economical solutions for any environmental project, either for greenfield smelter or revamping of existing plants, so as to meet the most stringent air pollution regulations. Technologies on display will include alumina injection dry scrubbing systems for potline and anode bake furnaces, coke fines injection dry scrubber for carbon plants, SO<sub>2</sub> wet scrubber using soda ash or sea water, lime/sodium bicarbonate injection dry scrubber for delacquering kilns and melting furnaces.

## **Pryor Giggey Co**

**#436**

Chehalis, Washington

Pryor Giggey celebrates its 53rd anniversary in 2001. We have been providing refractory products to the industry with unparalleled customer service and refractory innovation throughout our history. We have a long customer list of satisfied customers in the aluminum and copper producing industries and continue to strive for better performance and lower refractory cost to the customer. We are the exclusive licensee of Lafarge Refractaire Monolithiques for North America, which provides us with the state of the art in monolithic technology for solving customer demands

in problem applications and severe service conditions. We are the first producer to offer true self flow technology and to provide successful veneer repairs.

We have now introduced the most recent innovation in refractory installation—High density gunning—the low cost repair alternative to shotcrete. When you have a problem application and want the first team to help solve your refractory needs, give us a call at 1-800-4-HOTROX (800-446-8769) or stop by our booth at the TMS exhibition, #436.

## **Pyrotek Inc.**

**#400**

<http://www.pyrotek-inc.com>  
Spokane, Washington

**Pyrotek is committed to the advancement in metal processing technology worldwide.** With extensive technological resources, Pyrotek offers aluminium producers a comprehensive and accomplished range of high-temperature products and metal treatment systems.

### **Pyrotek products include:**

- SNIF® Degassing Systems & Replacement Parts
- PAL Degassing Equipment & Flux Injection Systems
- HD-2000 & PHD-50 Degassing Equipment
- Insura® Insulating Refractory Shapes
- Sivex® Ceramic Foam Filters & Glasweve
- Promag® Refining Agents
- Coveral® Fluxes
- Perlube® Lubricants
- O'-Sialon Industrial Ceramics
- Insulating Launderers & Launder Covers
- Graphite Components

*Consult Pyrotek for custom engineered solutions for all your consumables and metal processing needs.*

Pyrotek, Inc., 9503 E. Montgomery, Spokane, WA 99206, USA Phone: 509-926-6212 or Fax 509-927-2408

**R**

## **R&D Carbon Ltd.**

**#623**

Zurich, Switzerland

R&D Carbon Ltd. serves the petroleum coke, pitch and aluminum industries.

- **Research and Development:** Basic research is carried out to better understand relationships between raw material properties and process parameters.

■ **Technical Services:** Raw material evaluations for anodes, cathodes, and other carbon products are performed in bench or pilot plant scale. Technology audits and in-plant process optimisation are carried out at customer's plants.

■ **Laboratory Test Equipment:** Easily operated and reliable test instruments have set world-wide standards for testing carbon products.

■ **Bake Furnace Process Control:** An integrated bake furnace firing and process control system guarantees high productivity, low energy consumption and consistent anode quality.

■ **Training:** Special training courses in the basics of anode manufacture are offered in our training centre or at customer's location.

■ **Engineering:** A new process for green anode manufacturing allows the reduction in investment and operating cost. In cooperation with leading engineering companies our patented anode technology is marketed worldwide.

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## Radiometrie Corp

#846

<http://www.rmgauges.com/>  
Gaithersburg, Maryland

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## Resco Products Inc

#344

[www.rescoproducts.com](http://www.rescoproducts.com)  
Norristown, Pennsylvania

Resco Products, Inc. offers a full line of specialty refractories for monolithic repairs and perpetual linings for applications such as carbon baking, primary smelting, secondary melting and foundry operations. These monolithics and specialty refractories invariably provide the dependable performance you require under the harshest conditions and in the most corrosive atmospheres.

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## Rex Roto Corp

#317

<http://www.rexroto.com>  
Fowlerville, Michigan

Rex Roto Corporation is a leading world-wide supplier of refractory for the light metals industry. Our products and services include:

- Pyroform refractory for hot-top billet casting systems and ingot distribution pans
- High Performance Metal Delivery Systems from furnace to casting station
- Electric heaters for launder systems and filter bowls
- Thimbles, inserts, joint and patch compounds and other consumables

Rex Roto Corporation has a team of Engineers, Designers, and Metallurgists to aid in the complete design of your Metal Delivery System. Come visit us in Booth #317 to discuss your application.

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## Rexroth Mecman Pneumatics

#912

<http://www.us.rexroth.com>  
Lexington, Kentucky

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## RHI Refractories America

#723

Pittsburgh, Pennsylvania

RHI will display key brands for both metal contact and carbon bake applications. Visitors will find information about high performance products such as GREENKLEEN, VERSAFLOW, and PNEUCRETE monolithics for aluminum contact as well as KALA brick which is an industry standard for carbon bake furnaces. INSWOOL ceramic insulating products will also be highlighted.

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## Robin Industries

#838

Samoreau, France

**S**

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## Saint Gobain Industrial Ceramics

#217

Worcester, Massachusetts

The Non-Ferrous Metals Group, a business unit of Metallurgy Solutions, Saint-Gobain Ceramics & Plastics, Inc. will exhibit at the 2001 TMS Annual Meeting Exhibition. The Non-Ferrous Metals Group represents the former AnnaWerk, Norton Company, Carborundum Company and Savoie Refractaires.

Non-Ferrous Metals provides specialty refractories for molten metal containment and other critical metal contact applications. Refractory products for the aluminum industry include reduction cell sidewall bricks and blocks, melting/holding furnace ramp and hearth bricks, castables and mortars, immersion heater and thermocouple protection tubes for degassing equipment. Non-Ferrous Metals also supplies specialty and proprietary materials for critical areas in filter systems, molten metal pumps, troughs and dry vibration cements for coreless induction melting/holding furnaces. Non-Ferrous Metals products for the copper industry include shaft furnace liners, bricks, burner components, associated mortars and ramming cements, low moisture/high strength castables for launders, spoons and other critical metal contact applications.

Non-Ferrous Metals, Metallurgy Solutions is a worldwide business of Saint-Gobain Ceramics & Plastics, Inc. with a North American office located in Worcester, Massachusetts (telephone: 508-795-4081).

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## Scharf-Westfalia GmbH

#434

<http://www.dbt.de>  
Lünen, Germany

SCHARF WESTFALIA

The SWS Scharf Westfalia GmbH (SWS) was established in 1972, emerged from the former Gewerkschaft Eisenhütte Westfalia, later Westfalia Lünen and finally Westfalia Becorit.

Since 1995 SWS is fully owned by Deutsche Bergbau - Technik GmbH (German mining-technology) (DBT). DBT is a 100% subsidiary of RAG Ruhr Kohle AG.

The company is located in Germany in the cities of Lünen, head office (North Rhine Westphalia) and Uelzen (Lower Saxony)

Scharf Westfalia designs, develops, manufactures, and supplies turn key plants and systems as well as components for the Aluminium Industry.

The Aluminium division is responsible, amongst others, for state-of-the-art turn key Anode Rodding Shops, Anode Handling and Storage, as well Butt and Bath Treatment Plants for the Aluminium Industry.

The following systems are presenting our main product line:

Turn key plants, as well as individual equipments, for:

- Anode Rodding Shops
- Cleaning and handling of bath and butt material
- Baked and green anode handling and storage systems
- Cooling tunnel for anode butts and bath material
- Crucible cleaning
- Fully automated transport system for green and baked anodes
- Anode traverse beam for the handling of anodes in the electrolyte cell

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## SciDoc Inc

#438

Strongsville, Ohio

SciDoc, Inc. provides assistance in the preparation of scientific documents such as journal articles, proposals, and technical presentations. SciDoc specializes in materials science and related fields. The services provided include:

- **Editing and proofreading**
- **Writing or re-writing**
- **Reviewing submission guidelines** - Does your document meet all submission specifications?
- **Formatting** - Consistent formatting of all tables, section headings, styles, etc.
- **Composing technical presentations** in Microsoft PowerPoint



SciDoc, Inc. will save you time and increase the chances that your documents and presentations will be well received. Stop by the SciDoc booth for information on a special show discount.

## **Seco/Warwick**

**#722**

[www.secowarwick.com](http://www.secowarwick.com)  
Meadville, Pennsylvania

SECO/WARWICK produces custom engineered furnace systems for ferrous and nonferrous metals. We provide the complete spectrum of services for efficient furnace systems - beginning with initial support services, continuing through equipment manufacturing, installation, start-up and training. We specialize in products for the primary aluminum industry.

Visit booth 722 to meet with representatives from our Aluminum Process, Solution Heat Treat and Molten Metal teams.

*Are you getting maximum benefit from your heat treating systems? Ask us about our Aluminum Furnace Seminars offered in April and October.*

Learn more about SECO/WARWICK and register for our upcoming seminars at [www.secowarwick.com](http://www.secowarwick.com).

## **Selee Corporation**

**#200**

<http://www.selee.com>  
Hendersonville, North Carolina

SELEE Corporation is the premier supplier of ceramic foam filters, advanced ceramic products and services for use in the metals industries.

SELEE has maintained market and technical leadership by developing strong partnerships with customers. These partnerships allow customers to share SELEE resources to satisfy their quality and profitability goals.

SELEE Corporation is the only ceramic foam filter and refractories supplier in the world to achieve ISO 9001, QS-9000 and Ford Q1 quality certifications. This means SELEE Corporation will deliver to you on time the best quality products in the industry.

A partnership with SELEE provides our customers access to these resources:

- Commitment to Innovative New Products
- Advance Engineered Filter Bowls, Preheat Systems and Refractories
- Applications Engineering Team
- Fully Equipped Metallurgical Lab
- Dedicated Customer Service Team
- Global Direct Sales Force and Distribution Network
- R&D Pilot Plant Facility for:
  - Rapid Prototyping
  - Innovative New Product Development

- TQM Programs that Provide:
  - Continuous Improvement
  - Full Product Certification
  - Self Directed Work Teams
  - On-site Customer Training Programs

## **Sentech Corporation**

**#107**

<http://members.aol.com/sentechAZ>  
Tempe, Arizona

Sentech Corporation has been in business for more than 15 years. We produce a variety of capacitance based, non-contact, metal level measurement sensors. These sensors are designed to work in mold, headbox, launder and similar level control applications. Additionally, we produce actuators that can be used to control the flow of metal from stationary furnaces, along troughs, or into ingot molds. Our electronic MTS300 rack system allows our sensors and actuators to be integrated together and controlled from a single operator interface. Our MTS300 rack can operate as a stand-alone control system with internal PID loop functions or it can easily interface with customer PLC equipment to provide fast, reliable, metal level control.

## **Sermas Industrie**

**#829**

<http://www.sermas.com>  
Saint Quentin Sur Isere, France

SERMAS INDUSTRIE is a customer oriented company specializing in design, construction and commissioning of machines for the aluminium industry:

### **Complete sawing systems for slabs, T-bars and billets including:**

- Band Saw (cut rate up to 1100 sq. in/min)
- Chips suction system
- Handling equipment (downenders, conveyors, stop positioner, crops evacuation, etc.)
- Packaging equipment (scale, stamping, ink marking stacking, strapping, etc.)

### **Typical output:**

- One cut T-bar every 57 seconds
- One slab (cut at both ends) every 8 minutes
- Ladle skimming and cleaning machines
- Cathodes machines
- Anode machines (cooling tunnel, handling systems and rodding show equipment)

Your contact at SERMAS:

Jean-Christophe Garcin  
Tel: 33 4 76 7 42 42  
Fax: 33 4 76 93 67 76  
Email: [sermas@sermas.com](mailto:sermas@sermas.com)

## **SETARAM**

**#246**

<http://www.setaram.com>  
Caluire, France

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
- 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.

## **Silver Needle Inc**

**#351**

Kellogg, Idaho

### **Aluminized and Vinex® Clothing: Protection From Molten Aluminum and Metal Splash**

Our company started in a foundry: 13 years working and producing safe yet comfortable clothing. We listen because we know the frustrations of not being understood, of wearing clothing that doesn't fit, rubs, scratches and confines. Give us the opportunity to work for you and see if Silver Needle can make a difference.

### **WE ARE YOUR SOURCE FOR:**

- Technical briefs: Discover which fabric will protect the best
- MSDS for fabrics
- Test kits: Determine which fabric works best. Do your tests on site!
- Design requirements

Information Central - Call our toll free number: 1-800-863-7733

## **Skamol, Inc.**

**#542**

<http://www.skamol.com>  
Amherst, New York

When it comes to insulating materials knowing the right solution can make the difference in thermal efficiency, energy savings and lifetime of the lining. Skamol has an extensive know-how on optimizing insulation solutions in aluminium reduction cells, carbon baking furnaces and cast

house furnaces. We offer a wide range of thermal insulating products for service temperatures up to 1150°C (2102°F) including bricks, blocks, slabs and special shape pot-set insulation to fit individual cell designs. New products have been included in the product range and will be presented at the TMS show.

## STAS

#806

<http://www.stas-unigec.com>

Chicoutimi, Quebec, Canada

LA SOCIÉTÉ DES TECHNOLOGIES DE L'ALUMINIUM S.T.A.S. LTÉE

STAS is a dynamic and entrepreneurial company specialising in the commercialisation of new technologically advanced equipment. Industry sectors include aluminium and mines serving a global market place on a custom-made basis through the service of representatives in the Americas, Europe, Asia, Australia and Africa.

STAS is located in Quebec, Canada. World-class R&D facilities provide a continuing flow of new equipment to be commercialised; they include the Alcan R&D Centre, the Noranda Technological Centre and the Hydro-Québec Research Centre at Shawinigan.

STAS is a recognised leader in its innovative abilities to develop and fabricate sophisticated equipment which lower costs for its customers as well as improving quality - using the latest in programmable automation controls. Examples include compact degassing equipment, rotary injectors, dross coolers, filters, crucible cleaners, automatic guidance systems, etc.

## Stein Atkinson Stordy Ltd

#115

<http://www.s-a-s.co.uk>

Wombourne, Wolverhampton, United Kingdom

Stein Atkinson Stordy Ltd (SAS) has over 85 years of experience in supplying the Aluminium Industry with a variety of equipment including High Speed Coil Annealers, Foil Annealers, Melting Furnaces (Tilting, Static, Round Top, Side Well), Holding Furnaces (Tilting & Static), DC Casters, Shoe Pusher Furnaces & IDEX® Decoating/Drying Technology.

Projects can be totally installed, supply only or even partial design. We can also advise on upgrading existing equipment. Our highly regarded In-house Systems Division, designs, tests and builds Control Systems (Instrument, PLC or SCADA) to meet the end user's exact requirements.

## Stellar Materials Inc

#906

Northville, Michigan

Thermbond is a unique refractory technology with features and benefits unavailable in traditional refractories. Thermbond is completely and naturally non-wetting to aluminum. Thermbond bonds permanently to other refractories so existing linings may be veneered and repaired rather than replaced.

Thermbond may be cast, troweled, gunned, hot-gunned, pumped, or rammed for permanent repairs or new installations.

## Superior Graphite Co

#645

Chicago, Illinois

T

## 33 Metal Producing

#245

## Techmo Car & Engineering

#534

[www.techmo.it](http://www.techmo.it)

Limena, Padova, Italy

Over the last 40 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, tailor-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 & Thermic Refractories

#517

<http://www.thermalceramics.com>

Augusta, Georgia

Thermal Ceramics, a worldwide leader in refractory and high-temperature insulation technology, offers solutions for the most demanding thermal management challenges.

Products include:

- Kaocrete® and Kaolite® Castables
- K' Insulating Firebrick and Mortars
- Firebrick
- Cerrox® Refractory Fired Shapes
- TR-19®/TR-20® Structural Board Insulation

- Kaowool® Blanket/Strip/Bulk Ceramic Fibers
- Kao-Tex® Textiles
- Kaowool® and RPC® Boards and Shapes
- BTU-Block® Microporous Insulation
- Kaowool® Millboard
- Kaowool® Paper and Felts
- Pyro-Bloc® Weld-On and Veneering Modules

At the coming TMS Show in New Orleans, among the products we will highlight are Superwool® 607® and Superwool 607® Max®, new high temperature non-ceramic fiber insulating materials available in various forms such as bulk, blanket, boards and modules.

## Thermal Systems America

#108, 110

[www.thermalsystemsamerica.com](http://www.thermalsystemsamerica.com)

Canastota, New York

Thermal Systems America has successfully manufactured drop-in precast refractory liners for aluminum induction melters. One liner, installed into a 10,000 lbs. melter at one location, has melted well over 21 million pounds of aluminum. The liner is fitted with a lifting grab for crane placement inside the furnace. Removal of the Thermal Systems America spent precast refractory liner is also easier and quicker.

## Thermcon Ovens B.V.

#235

<http://www.thermcon.com>

Geldermalsen, The Netherlands

Thermcon Ovens B.V. is a leading specialist in the design and delivery of aluminium casthouse equipment such as charging machines, melting furnaces, holding furnaces, metal filter boxes, d.c. casting machines and homogenizing / cooling facilities. State of the art aluminium scrap recycling facilities capable of handling contaminated aluminium scrap in full compliance with the latest very strict European legislation, are supplied to the recycling industry. These recycling facilities have time after time proven to meet or exceed the most stringent environmental regulations in the world.

Revamping and modernization of existing equipment is also undertaken.

Thermcon also undertakes the design and implementation of computer control systems at machine level, level 2 as well as the connection to plant wide computer networks.

All equipment is custom designed and exactly tailored to the requirements of the customer.

## Thorpe Technologies

#223

<http://www.thorpetech.com/>  
Whittier, California

Thorpe Technologies Inc, a professional engineering organization, focuses exclusively on the design, development, engineering, and construction of industrial furnaces, delacquering systems, thermal oxidizers, and related thermal technology.

Aluminum product line includes:

- Apros-based technology delacquering systems
- Rectangular Melting Furnaces
- Sidewell Melting Furnaces
- Dry Hearth Melting Furnaces
- Round Top Charge Melting Furnaces
- Tilting Melting Furnaces
- Rotary Melting Furnaces
- Stationary Holding Furnaces
- Tilting Holding Furnaces
- Batch Homogenizing Furnaces
- Continuous Homogenizing Furnaces

Thorpe Technologies Inc is headquartered in Whittier, CA; Tel: (562) 903-8230 with a branch office serving the eastern United States located in Gulf Shores, AL; Tel: (334) 968-6211.

Projects in Mexico are handled by Thorpe Mexico SA de CV; Tel: (52) (8) 335-2035. Projects in Brazil are handled by Thorpe do Brasil Ltda; Tel: (55) (11) 5579-0092.

For 85 years the Thorpe industrial furnace design group has provided industrial furnace design and engineering services to clients throughout the United States and abroad. The Thorpe Technologies Inc organization is one more step to do an even better job in the rapidly changing, and increasingly technical, furnace design marketplace.

## Tyco Flow Control – Terry

#753

<http://www.tycoflowcontrol.com.au>  
Ringwood, Victoria, Australia

tyco Flow Control Pacific acquired Terry Fluid Controls in 1998. Terry has been a supplier of crustbreaking, feeding cylinders and control cabinets for many years, where its specialised technology and premium quality cylinders are considered industry benchmarks. They have been installed in major smelters in Australia, U.S.A, Middle East and New Zealand. The Terry package includes the patented Terrycom air saving device and stroke signal valve. The Terrycom saves up to 40% of compressed air consumption. The stroke signal valve supplies position sensing for both front and rear, this can help detect non-breakers and stuck picks.

## U

### UES Software Inc.

#122

<http://www.ues-software.com>  
Annapolis, Maryland

UES Software Inc is a dynamic leader in providing material process simulation and design software. The software packages being displayed increase productivity, cut costs, improve quality performance, and control environmental hazards.

Demonstrations of the powerful thermo-chemical software for predicting phase behavior and properties, kinetic software for solving and modeling chemical reactions, and material specific databases for modeling processes will be available.

Also being presented will be ProCAST®, an invaluable tool throughout the world, used to simulate the behavior of industrial casting applications.

### U S Dept of Energy/Office of Industrial Technologies

#905

[www.oit.doe.gov](http://www.oit.doe.gov)  
Washington, DC

The U.S. Department of Energy's Office of Industrial Technologies (DOE-OIT) has formed partnerships with the most energy intensive U.S. industries to accelerate the development of energy efficient technologies and processes. The DOE partnership with the Aluminum Industry will be highlighted. The DOE-OIT Aluminum Partnership funds R&D to address the research needs of the Aluminum industry as identified in the Aluminum Industry Technology Roadmap. The Aluminum Partnership supports and enhances the global competitiveness and ecological sustainability of the U.S. aluminum industry through strategic, leveraged investments in technologies that save energy, improve productivity, and reduce waste.

### US Filter

#935

<http://www.usfilter.com>  
1105 N. Point Blvd.,  
Baltimore, MD 21224  
410-284-1717 phone  
410-285-8264 fax

USFilter provides solutions to water and wastewater problems employing a one-stop-shop approach to total water management. Services range from the supply of unique equipment and technologies to the design and building of turn-key facilities, through acquisition, ownership and operation of water, wastewater or utility facilities. A partial list of equipment and services includes pretreatment, softening, cyanide treatment, thickening, clarification, chemical feed, sludge dewatering, media filtration, oil/water separation or recovery, pH adjustment and liquid/solid separation. USFilter has over 50 years of experience in the design, construction and operation of steel industry wastewater treatment facilities.

## V

### VAW Aluminium-Technologie GmbH

#335

<http://www.vaw-atg.de>  
Bonn, Germany

VAW Aluminium-Technologie GmbH (VAW-ATG), a subsidiary of VAW aluminium AG, is specialised in tailor-made modernisation projects for aluminium smelters. The core competencies of VAW-ATG comprise process modeling, process control, aluminium and carbon technology, casthouse technology as well as technical engineering.

The enhanced version of the proprietary VAW process control system ELAS will be presented, together with the "intelligent" crust breaker/feeder development. Significant improvements in the ELAS control algorithm together with the powerful breaker/feeder system are a step forward to a Zero-Anode-Effect operation of reduction cells. The window-oriented graphical user interface of the ELAS pot control system is an outstanding instrument for the retrieval of operational data and in-depth analysis of exception states of reduction cells.

### Vesuvius

#801

<http://www.vesuvius.com>  
Welland, Ontario, Canada

Vesuvius, a member of the Ceramics Division of the Cookson Group, has consistently been a world leader in the supply of refractory products and services for the Aluminum industry. The acquisition of Premier Refractories and Chemicals Inc has further strengthened our position in this regard.

We are able to provide products and services for Anode Baking Furnaces, Electrolytic Reduction Cells, Cast House melting and holding furnaces, and Metal Transfer applications through to Hot Mill Finishing requirements.

Vesuvius offers a complete line of dense and insulating firebrick for Anode Baking, as well as fired Carbon cathode and sidewall blocks, nitride and sialon bonded silicon carbide refractories, and Cold Ramming Paste for Reduction Cell needs.

A full range of castables, plastics, mortars and ceramic fibre products designed specifically for aluminum cast house applications are available. The **Alugard**® product line is a world leader in non-wetting castables, and can be cast, gun-ned, pumped or supplied as pre-cast shapes.

Products such as **Alucl**® reticulated ceramic filters: **Zyrock**® and **Zyfoam**™ pouring accessories for Casting Tables, as well as silicon carbide **Immersion Heater Protection Tubes** are available for a variety of Metal Transfer area requirements.

This complete product offering combined with design and engineering services, as well as construction and installation capabilities makes Vesuvius a global leader in supplying the total Aluminum industry.

## **Vulcan Refractories Limited** #117

<http://www.vulcan-refractories.co.uk/>  
Cheadle, Staffs United Kingdom

Vulcan Refractories have a long-term commitment to the supply of quality refractories and industrial ceramic materials. The company has over 30 years experience in the manufacture of high duty refractory materials for use in high temperature or aggressive atmosphere applications. The product range is based around 3 main material groups:

- Silicon Carbide
- Alumina and Mullite
- Zirconia

Major applications are:

- Primary aluminum—Silicon nitride bonded silicon carbide blocks for lining primary reduction cells
- Secondary aluminum—Silicon carbide, alumina and aluminum titanate shapes for flow control, launder and furnace tapping areas
- Copper—Silicon carbide linings for melting and holding furnaces
- Powder metallurgy—Zirconia, alumina and aluminum titanate flow control nozzles

## **W**

## **Wagstaff Inc** #501

<http://www.wagstaff.com>  
Spokane, Washington

Wagstaff, Incorporated, Spokane, WA USA is a 54 year old company known worldwide for manufacturing customized equipment for Direct Chill aluminum casting of semi-fabricated rolling ingot and extrusion billet. Wagstaff customers, located in over 45 countries around the world, have long

known the benefits of high quality Wagstaff MaxiCast Hot Top Billet Casting Tables equipped with the Wagstaff AirSlip Air Casting Process. Also known for it's leading technology in Wagstaff ShurCast Casting Machines, Wagstaff AutoCast Automated Casting Control System, and Wagstaff LHC Low Head Composite Casting System. Wagstaff innovations are invented, first built and tested in it's expansive, triple casting pit, Research and Development facility.

## **Wienalco** #327

<http://www.wienalco.com>  
Velsen-Noord, The Netherlands

WIENALCO is formed around a group of experts with decades of experience in the aluminium smelter industry. WIENALCO serves the industry with a wide range of aluminium smelter, carbon baking and graphitizing industry dedicated machines.

Modernisation in existing smelters and baking furnaces is our special expertise. Improvement of labour working conditions, improvements on machine efficiencies including adding new operation tools are recognised to be most valuable.

The scope of supply comprises:

- Pot Tending Machines (prebake, søderberg, radio and cab control)
- Anode Baking Furnace Tending Machines (as well as stationary vacuum installations)
- Crane Transfer Systems (gantry, lifting beams, retractable buffers)
- Cathode Removal Cranes
- Anode Jacking Frames (automatic, cold and hot frames)
- Anode Rod Clamps
- Crucible Cleaning Machines (including pre-heaters, dedusting)
- Tube Cleaning Machines
- Alumina Unloading Facilities (including dust free conveying and storage systems)
- Machine power supplies
- Rails, clips, underlayment
- Storage silos.

## **Z**

## **Zircar Ceramics Inc.** #211

<http://www.zircarceramics.com>  
Florida, New York  
Tel: 845 651 6600  
Fax: 845 651 0441  
e-mail [sales@zircarceramics.com](mailto:sales@zircarceramics.com)  
website: [www.castertips.com](http://www.castertips.com)

For more than a dozen years, ZIRCAR has been synonymous with high quality, soft castertips for use in the continuous casting of thin aluminum strip. We are now introducing several new high quality castertip products for use on just about every type of twin roll thin strip caster being used today. ZIRCAR Castertips are combinations of shot free fiber and inorganic binders and are used in the production of pin hole free foil. Castertip Type ASQ is our soft tip. Type Z-290 is a medium density tip. Z-450 is a high density, hard tip. All of these tip products are also produced in NON RCF compositions as well. Many other ZIRCAR Casthouse products are also available.

## **Zircar Refractory Composites** #242

[www.zrci.com](http://www.zrci.com)  
Florida, New York

## **ZYP Coatings Inc** #942

<http://www.zypcoatings.com>  
Oak Ridge, Tennessee

ZYP® Coatings, Inc. is the premier manufacturer of paintable boron nitride coatings. For aluminum billet producers (Wagstaff casters), three boron nitride paints are presented

- BLUE-COLORED Tableguard
- Transition Plate Coating (TPC)
- Ring-Seal.

Tableguard greatly extends casting-table refractory life, while giving inclusion-free pours, stopping dross buildup, and allowing easy removal of any mispours. Both water-based and solvent-based Transition Plate Coating (TPC) products are available for this application. Ring-Seal is a totally nonwetting, seal for transition-plate/graphite-ring joins.

ZYP Coatings provides true, total nonwetting boron nitride paints for all areas of processing molten nonferrous metals. Boron Nitride Lubricoat (WHITE or BLUE-COLORED) is ideal for extending the life of refractory troughs, launders, runners — while providing smooth flowing action. Boron Nitride Releasecoat (WHITE or BLUE-COLORED) gives Teflon®-like mold release and mirror-like (cosmetic) surface finishes for low-draft, high-drag areas in permanent molds. Boron Nitride Hardcoat is ideal for ladles, skimmers, and areas needing some abrasion-resistance.