



To make glass better,
put us in the mix.

Our in-house melting experts can help you improve combustion to increase glass production, reduce fuel consumption, improve glass quality, and reduce emissions. Including NO_x, SO_x, CO₂ and particulate matter every day.

From the very first oxygen enrichment applications to our latest Cleanfire® burners, we've delivered safe, low-emission oxy-fuel solutions for over 50 years. And, right now, in addition to providing reliable gas supply, our team is optimizing production for hundreds of furnaces all over the world.

Call 800-654-4567 to put the skills and experience of our global team to work for you. When you want improved melting, add one key ingredient. Us.



tell me more

www.airproducts.com/glass

October 1-3, 2012 • Hilton Cincinnati Netherland Plaza • Cincinnati, Oh



where glass manufacturers & suppliers meet

Conference Guide

Endorsed by The American Ceramic Society



Official journal of the Conference on Glass Problems



Presented by the Glass Manufacturing Industry Council and Alfred University



PM, SO_x and NO_x IN ONE SYSTEM

Visit Us in
Booth #E8

Ceramic Filter Systems are the New Standard for Glass Furnace Emissions Control

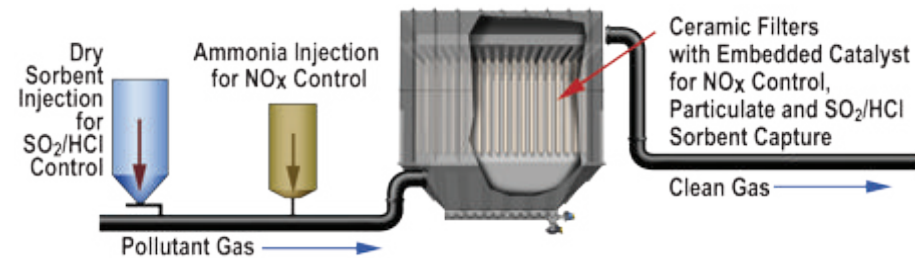
Air-Fuel Furnace Emissions

UltraCat catalyst filter system treats particulate, SO₂, HCl, metals and NO_x in a single all-in-one system

Oxy-fired Furnace Emissions

UltraTemp standard filter system treats particulate, SO₂, HCl, and metals in a single integrated system

- Lower initial capital cost
- Lower operating and maintenance cost
- Higher performance



- Treats any gas flow volume – modules are placed in parallel.
- Multiple modules provide built-in redundancy to ensure up-time. No “ESP bottleneck.”
- If a module is taken off-line for service, the other modules treat the entire flow at a temporary higher pressure with no change in performance.



Contact Kevin Moss, Business Development Director, at (801) 294-5422 or kevin.moss@tri-mer.com



Technology Leader
air pollution control
www.tri-mer.com

Since 1960 Factory and Headquarters: Owosso, Michigan

©2012 Tri-Mer Corp.

We've been controlling emissions for the glass industry since 1973.

Over 230 glass installations



• Wet Electrostatic Precipitators



• DeNO_x Systems

• Acid Gas Scrubbers

• Dry Electrostatic Precipitators



• Baghouses



• Regenerative Thermal Oxidizers

McGill AirClean LLC

An enterprise of United McGill Corporation — Family owned and operated since 1951

614/829-1200, Web site: mcgillairclean.com

Please stop by and visit with us: Hospitality Suite H4



Conference on Glass Problems

October 1-3, 2012 • Hilton Cincinnati Netherland Plaza • Cincinnati, Oh

EXHIBITOR/HOSPITALITY SUITE HOSTS

Advanced Control Solutions, Inc.

Booth: E1 and Salon E

8750 Resource Park Dr., Sylvania, OH 43560

Phone: +1-419-843-4820

katiemarconi@acsitoledo.com | www.acsitoledo.com

As an integrator of information and control system solutions, ACSI engineers in both the United States and Europe are able to provide customers with quality technical engineering, system design, factory acceptance, installation supervision, commissioning services, and training. Our knowledge can be applied to Float Glass, Fiberglass, Container Glass, Tableware, Lighting, Tubing, and Specialty systems. Types of solutions we provide are temperature control, DCS replacement, batching control, glass level control, model based control, packaging & sortation control, and production tracking.

AEG Power Solutions USA, Inc.

Booth: E35

800 Klein Rd., Suite 400, Plano, TX 75074

Phone: +1-469-229-9600

stephen.losik@aegps.com | www.aegps.com

Since its inception in 1887, AEG Power Solutions has become one of the world's most recognized innovators in power solutions technology. Our experienced engineers can address your toughest design challenges. Ranging from watts to megawatts, AEG Power Solutions produces custom AC or DC power solutions for the most demanding applications. AEG's offers four series of SCR power controllers designed to meet your specific needs. Built for performance, AEG power controllers are among the most reliable solutions in the market.

AGC Ceramics Co., Ltd.

Booth: E19

4-1-23, Shiba, Minato-ku, Tokyo, 108-0014 Japan

Phone: 81-3-5442-9177

masaru-ota@agc.com | www.agcc.jp

For over 90 years, AGC Ceramics has accumulated substantial technologies related to glass furnaces. By integrating these technologies, AGC Ceramics aims to provide the customers with optimum solutions to manufacture high quality products and minimize the total cost throughout the life of glass furnaces.

Air Products

Booth: H5-H8

7201 Hamilton Blvd., Allentown, PA 18195-1501

Phone: 1-800-654-4567 or 610-706-4730

gigmrktg@airproducts.com | www.airproducts.com/glass

We are the leader in proprietary oxygen enrichment and oxy-fuel technologies that, with minimal capital investment, can help you increase production, lower fuel costs, reduce emissions, and improve your operation.

Allstates Refractory Contractors, LLC/Bock Energietechnik

Booth: E10

PO Box 256, Waterville, OH 43566

Phone: +1-419-878-4691

info@allstatesrefractory.com | www.allstatesrefractory.com

Industrial process general contractor to the glass, metals and specialty industries. ARC specializes in rebuilds, retrofits, and online repairs. The addition of a technical agreement with Bock Energietechnik, ARC now has electric boosting and melting technology to offer its North American customers. ARC also, has embarked in green technology with a line of environmental dust recycling systems for baghouses and DEP's. These systems will service all types of glass compositions and allow the user to recycle dust without human interface.

Ametek Land, Inc.

Booth: E22

150 Freeport Rd., Pittsburgh, PA 15238

Phone: +1412-826-4444

irsales@ametek.com | www.ametek-land.com

Infrared temperature measurement product range includes on-line thermometers and systems, portable infrared thermometers, thermal imagers, and infrared linescanners.

Antonini S.R.L.

Booth: E30

Via Medaglie D'oro della Resistenza.2,

50057 Ponte a Elsa (F1), Italy

Phone: 011-39 0571-93221

antonini@leonet.it | www.antoninisrl.com

Designers, Manufacturers, Suppliers and Installers of Annealing and Decorating Lehr's also special Lehr's for Glass blocks, Toughening and Car Head Lamps. Mould pre-heating Ovens. Represented in the USA by Argent Enterprises Inc., +1-724-499-5800 or aeinc@windstream.net.

Vesuvius USA

Booth: E34

753 Enterprise Rd., Dillon, SC 29536

Phone: +1-843-774-6026

Susan.coward@us.vesuivus.com | www.vesuvius.com

The Fused Silica Division is a worldwide leading supplier of fused silica products used in Primary Glass Fabricating, Glass Forming, Heat Treatment, Specialty Steel and Photovoltaic Industries. In addition to our ability to manufacture on three continents, VESUVIUS has an extensive amount of technical expertise to support our existing market segments as well as to assist in developments of new solutions for applications such as Thin Film Coating Systems, Diffusion Furnaces, and Crystal Fusion.

Voeller Mixers, Inc.


Booth: E4

455 North Moore Rd., Port Washington, WI 53074

Phone: +1-262-284-3114

joe.fisher@voellermixers.com | http://voellermixers.com


Voeller Mixers, Inc is a proven equipment manufacturer with over forty years of experience in the glass, fly-ash and manufactured concrete products industries. The Voeller Cyclo-Mixer is available in capacities from .4 cubic meters to 4.6 cubic meters with either V-belt drive or mechanical drive transmissions. The Cyclo-Mixer is designed and constructed to provide a fast, aggressive mixing action that delivers consistent quality day after day.



How to Weather the Storm and Outlast the Next One

Lost production time = lost revenue.

Furnace problems need to be resolved FAST!
And you need a reliable solution that will endure time's test.



Allstates Refractory Contractors has been fortifying the glass industry with unique and creative solutions for more than a decade. When you need a repair, our team of experts will design the right solution for you and get it implemented with efficiency and skill. Because we know what it's like to be faced with a storm. And we've made it our mission to get you through yours.

Join us Tuesday when we present an innovative global perspective of electric melting and boosting and be part of an exclusive introduction to Bock Energietechnik, a German-based company leading the way in glass industry technologies.

Stop by our booth to get an insider's scoop AND your chance to win a one-of-a-kind gift!

ALLSTATES REFRACTORY CONTRACTORS, LLC | www.allstatesrefractory.com | 419.878.4691



Conference on Glass Problems

October 1-3, 2012 • Hilton Cincinnati Netherland Plaza • Cincinnati, Oh

Safety Controls Technology

Booth: E31

5075 Taylor Dr., Bedford Heights, OH 44128
Phone: +1-216-587-3000
mbeargle@safetycontrolstech.com
www.safetycontrolstech.com

Safety Controls Technology, Inc. (SCT) provides safety and health services for glass demolition and rebuild sectors including clients that have requirements to comply with local, state or federal regulations. SCT is a Woman-Owned Business Enterprise (FBE, DBE, SBA, EDGE) delivering comprehensive Occupational and Environmental Engineering consulting services to both the public and private sectors.

Saint-Gobain Sefpro

Booth: Salon H

10300 Ormsby Park Place, Suite 450, Louisville, KY 40223
Phone: +1-502-423-6333
www.sefpro.com

SSOE Group

Booth: Suite G

1001 Madison Avenue, Toledo, OH 43604
Phone: +1-419-255-3830
bwittes@ssoe.com | www.ssoe.com

At SSOE, our experience spans decades and includes projects with every major glass manufacturer, every aspect of plant operations, and furnace design. We promise to save you time, trouble, and money. We can make this promise because we've achieved savings on multiple projects. Over 800 projects completed in the last five years alone. SSOE has worked extensively in the glass industry, and we apply this broad knowledge to come up with the best solution for clients that manufacture containers, specialty glass, fiberglass, float glass, residential shingles and automotive glass.

Toledo Engineering Co., Inc.

Booth: Salon I / E23

3400 Executive Parkway, PO Box 2927, Toledo, OH 43606
Phone: +1-419-537-9711
lorik@teco.com | http://www.teco.com

The TECO Group, consisting of Toledo Engineering Co., Inc., TECOGLAS Ltd., KTG Systems, Inc., KTG Engineering Ltd., ZEDTEC Ltd. and Dreicor Inc. specialize in the design and construction of glass melters of all types, including

fuel-fired regenerative and recuperative furnaces, oxy-fuel furnaces, electric melters, electric boost systems and forehearths and distributors/working end. The TECO Group also provides batch plants, emission control systems and process control systems on a turnkey basis. KTG Engineering Ltd. manufactures many items of furnace equipment such as batch chargers, electrode holders, spy hole covers, etc.

Tri-Mer Corp.

Booth: E8

1400 Monroe St., Owosso, MI 48867
Phone: +1-801-294-5422
kevin.moss@tri-mer.com | www.tri-mer.com

Tri-Mer Corporation offers the UltraCat Catalyst Filter System for glass furnace emissions. Based on low-density ceramic filters, the technology offers a high-performance approach to removing Particulate, SO₂, HCl, and NO_x in a single all-in-one system. Acid gases such as SO₂, HCl, and HF are removed with dry sorbent injection. NO_x is destroyed by nano-bits of SCR catalyst embedded in the filter element in conjunction with ammonia injection. Other pollutants such as metals are effectively captured. If only PM or PM+ SO₂/HCl need to be controlled, standard filters without catalyst are highly efficient at temperatures up to 1650°F.

Umicore AG&Co KG

Booth: E20

Platinum Engineered Materials, Rodenbacher Chaussee 4, 63457 Hanau-Wolfgang, Germany
Phone: +49 6181 59 8197
sven.jantzen@eu.unicore.com | http://unicore.de

Umicore's business unit Platinum Engineered Materials is a global technology leader for either cast or FKS Platinum materials based single-source, tailor-made, engineered system solutions to the special glass industries. We support key players to reach the best possible performance with their special glass production processes at the interface of our Platinum Group Metal Components and its immediate periphery by means of our Process Excellence Model. Process Excellence translates into total cost reduction (savings), increase of competitiveness (solutions), and reduction of risk (security).

Argent Enterprises, Inc.

Booth: E25, E29, E30

PO Box 163, Graysville, PA 15337-0163
Phone: +1-724-499-5600
aeinc@windstream.net | http://aeincglass.com

Argent Enterprises Inc provides Consulting and material supply services to the glass industry with the assistance of associated Companies. As the exclusive agent in the United States for the following companies: Motim Fused Cast Refractories Ltd-Hungary E25 Suppliers of AZS materials; Parkinson Spencer Refractories Ltd-England E29 Suppliers of Distributor & Forehearth systems, and Refractory materials; and Antonini srl-Italy E30 Suppliers of Lehr's. Also Exclusive Agents for Zippe GmbH-Germany; Maguin-France; Pneumofore-Italy; JSJ Jodeit-Germany; Falorni-Italy; Batisti-Italy; and Lubisol-Bulgaria.

BASF Corp., Temperature Sensing Products

Booth: Salon D

46820 Fremont Blvd., Fremont, CA 94538
Phone: +1-732-679-0532
porfidio.muinz@basf.com
www.catalysts.basf.com/tempsensing

BASF supplies Temperature Sensing Products that increase profit. Over 60 years of glass industry experience makes BASF uniquely qualified to provide critical temperature insights for increased process yields. BASF's High Temperature Thermocouples and Exactus[®] Optical Pyrometers incorporate technology breakthroughs which enable more profit from existing production facilities by providing unique temperature measurement solutions for process critical applications, such as:

- Gob
- Container mould
- Fiberglass stream
- Fiberizing disk
- Forehearth
- Furnace crown and bottom

Bottero S.p.A.

Booth: E16

Via Genova 82 12100 Cuneo, Italy
Phone: +39 071 310 383
elisa.poetto@bottero.com | www.bottero.com

Canty

Booth: H11

6100 Donner Rd., Buffalo, NY 14094
Phone: +1-716-625-4227
sales@jmcanty.com | http://jmcanty.com

Canty High Temperature insertion cameras are ideal for demanding applications such as glass furnaces involving visual inspection or verification in extreme. Glass Level, Ribbon, Speck Detection and Particle Size are among other applications.

CelSian Glass & Solar b.v.

Booth: E12

De Rondom 1; 5612 AP Eindhoven, The Netherlands
Phone: +31 88866 2501
infodesk@celsian.nl | www.celsian.nl

Same people....New name. The TNO Glass Group has a new name: CelSian Glass & Solar b.v. As a 100% TNO company, the entity has more freedom to further expand the industrial services and synchronize technological developments to the needs of the glass industry. CelSian continues to assist the customers in optimizing their glass and solar production and reinforces the innovation of the needed manufacturing equipment and materials. Energy / Emission reduction and GLASSTREND remains important focus points. Our customers are globally supported by:

- Contract research
- Technological innovations
- Industrial services
- IP & software licenses
- Laboratory & pilot facilities
- Knowledge transfer

save the date

The 74th GPC is October 14-16, 2013
in Columbus, Ohio at the
Greater Columbus Convention Center.



Conference on Glass Problems

October 1-3, 2012 • Hilton Cincinnati Netherland Plaza • Cincinnati, Oh

DIAS Infrared Corp

Booth: E9

6 Barbara Dr., Warwick, NY 10990

Phone: +1-845-544-7055

sales@dias-infrared.com | www.dias-infrared.com

DIAS Infrared GmbH has established itself over 25 years as a leading player in the field of infrared technology. The focus is accurate non-contact temperature measurement in industrial processes. DIAS Infrared customers benefit from the extensive experience of our R&D, manufacturing and sales specialists for PYROVIEW uncooled fixed infrared cameras, PYROLINE line cameras, PYROSPOT pyrometers, and PYROTHERM, blackbody calibration sources. In addition we provide complete industrial infrared system solutions, pyroelectric detectors, calibration and R&D services. These are all now more available in North America through the DIAS Infrared Corp. subsidiary.

DSF Refractories & Minerals Ltd.

Booth: E14

Friden, Newhaven, Nr. Buxton, Derbyshire, SK17 0DX UK

Phone: +00 44 01629 636271

swells@dsf.co.uk | www.dsf.co.uk

DSF Refractories & Minerals Limited; established in 1892 in the Derbyshire Peak District is the largest shaped refractory manufacturer in the UK. Recognised as one of the worlds leading suppliers of bonded refractories to the glass industry, products include a wide range of high alumina refractory bricks & shapes based on mullite, andalusite, chamotte, bauxite, spinel and pure alumina. Shapes are manufactured by pressing or casting techniques which are then high fired to give optimum properties in service. The company has a highly knowledgeable sales & technical team with a determination to provide the best solution for our customers.

Emhart Glass

Booth E6

405 East Peach Ave., PO Box 580, Owensville, MO 65066

Phone: +1-573-437-2132

info@emhartglass.com | www.emhartglass.com

Emhart Glass is the world's leading international supplier of equipment, controls and parts to glass container industry. With broad-based expertise in glass container forming, glass conditioning, gob forming, ware handling, cold end inspection, refractory parts and quality assurance,

the company's machines and systems are established as standard products worldwide. Emhart Glass also provides installation, training, production assistance, and maintenance related services.

Fosbel, Inc.

Booth: H19

20600 Sheldon Rd., Brook Park, OH 44142

Phone: +1-216-362-3900

fosbel.inc@fosbel.com | www.fosbel.com

Fosbel offers a wide range of repair and inspection services and has conducted more than 2,500 repairs to virtually every type of glass furnace around the world. In addition to Ceramic Welding technology to repair refractory at operating temperature, Fosbel has also developed many innovative hot repair solutions including Port Floor Restoration, Checker Cleaning, Dual Crown Overcoating and Hot Bottom Repairs. Fosbel's experienced engineers and technicians are familiar with almost any furnace condition, and repairs are conducted in an effective and efficient manner, providing improved energy efficiency while minimizing production downtime.

Frazier-Simplex, Inc.

Booth: H12

436 East Beau St., Washington, PA 15301

Phone: +1-724-225-1100

bhaughan@frazier-simplex.com | www.frazier-simplex.com

The Fuse Tech/Hot Tech Group

Booth: Salon B

3400 Silica Rd., Sylvania, OH 43560

Phone: +1-419-841-9323

sales@fusetech.com | www.fusetech.com

Fuse Tech's core business is Ceramic Welding and Refractory Repair on both cold and hot furnaces. We also have equipment to photograph inside the furnace for use in damage and operation evaluation. Through the use of high pressure water lasers, Fuse Tech is able to remove debris from port sills as well as the tops of checker packs and flues and tunnels. Hot Tech will help you with your Refractory and Operational Problems. Specializing in drilling, rebuilds, hot repairs, cold repairs, diamond chainsawing, burner block replacements and overcoats. Fuse Tech/Hot Tech also is a source for Consulting on furnace operation and refractory problems.

is a portable self-contained unit that requires no leveling or targets. Its foldable measuring head and metal casing gives this system the ability to digitize difficult projects in the field or at the shop. Proliner focuses on complete industry solutions from capturing dimensions all the way to fabrication. Proliner data is transferred as DXF drawings that are easily transferable to CAD software or production machinery. The Proliner is the perfect tool to turn physical shapes and spaces into digital information.

Pyrotek, Inc.

Booth: E17

1285 Claremont Rd., Carlisle, PA 17015-9727, USA

Phone: +1-717-249-2075

info@pyrotek.info | www.pyrotek.info/glass

Improve quality and pack rates, lower costs and narrow your vendor base with Pyrotek, a global company headquartered in North America. Pyrotek offers an entire line of custom-made products for glass ware handling.

- Take-out Holders with DuPont™ Vespel® Inserts
- Sweep-outs
- Stacker Bars
- Transfer Wheel Parts
- Shear Blades
- Expendable Refractory Feeder Parts
- High Temperature Rollers and Insulation
- Custom Manufactured Seals and Gaskets
- Glass Bending and Tempering Stainless Steel Cloths and Tapes

REDWAVE™ BT-Wolfgang Binder

Booth: E33

Muehlwaldstr. 21, 8200 Gleisdorf, Austria

+43 3112 8377-0

office@redwave.at | www.redwave.at

As your reliable partner in glass processing, we offer the most innovative sorting methods, allowing us to guarantee an unprecedented purity of sorted materials. NEW: REDWAVE QMS Quality Management System Processed recycled glass cullet is the most important raw material for the container glass industry and the better the quality the more of it can be utilized. With the REDWAVE-Quality-Management-System (REDWAVE-QMS), BT-Wolfgang Binder offers an excellent tool to continuously control and monitor the sorting process. Basically the REDWAVE-QMS consists of: – REDWAVE-Process Monitoring and Control System (REDWAVE-PMCS) for the continuous monitoring and optimizing of the sorting process by means of permanently analyzing the individual sorting steps. – REDWAVE Sample-Analysing-System (REDWAVE-SAS) for the continuous quality analyses of the furnace-ready cullet. The combination of these two systems guarantees optimum performance of the beneficiation processes and the production of high quality raw material for the glass industry.

Refractory Machining Services, Inc.

Booth: E26

610 East Butler Rd., Butler, PA 16002

Phone: +1-724-285-7674

sales@refrmachserv.com | www.refrmachserv.com

Refractory Machining Services is dedicated to serving the glass and refractory industries. We specialize in precision machining of standard and custom refractory shapes. We offer grinding, sawing, drilling, shaping, and construction of custom assemblies including canals lip and spouts assemblies. RMS has over 120 years of combined experience and knowledge in the refractory industry. We understand the requirements of our customers and combine quality with service.

RHI US Ltd.

Booth: Salon M

1077 Old State Route 74, Batavia, OH 45103

Phone: +1-513-753-1254

lori.whalen@rhi-ag.com | http://rhi-ag.com

RHI AG is the world market and technology leader in high-grade ceramic refractory materials. A global player with Austrian roots, RHI employs roughly 8,000 people worldwide at 33 production sites in Europe, North America, Latin America, South Africa and China and is represented by over 70 sales offices in four continents. RHI is the only global refractories supplier to offer products for all aggregates of the basic industry. The RHI umbrella brand combines a series of traditional brands that have been established in the market for many years, including Didier, Veitscher, Radex, Dolomiti Franchi, Interstop and Monofrax.

RoMan Manufacturing, Inc.

Booth: E18

861 47th St. S.W., Grand Rapids, MI 49509

Phone: +1-616-530-8641

www.romanmfg.com

RoviSys

Booth: H9-10

1455 Danner Dr., Aurora, OH 44202

Phone: +1-330-995-8103

glass@rovisys.com | www.rovisys.com/glass

RoviSys is an engineering services company that specializes in process control and information automation. Our Glass division has incorporated state of the art systems around the world for all major glass manufacturers. As an independent company, we work with you to design and develop the best solution to meet your needs.



Conference on Glass Problems

October 1-3, 2012 • Hilton Cincinnati Netherland Plaza • Cincinnati, Oh

Parkinson-Spencer Refractories Ltd.

Booth: E29

Holmfield, Halifax, West Yorkshire, HX3 6SX UK
Phone: +44 (0) 1422 254472
admin@parkinson-spencer.co.uk
www.parkinson-spencer.com

Parkinson-Spencer Refractories Ltd. manufacture and supply refractories, engineer products and systems for the glass industry. Products include:

Refractories Division

- Feeder forehearth refractories for all types of forehearth
- Dense bonded alumina glass contact blocks for the distributor and forehearth
- Forehearth channel blocks in zircon-mullite
- Furnace blocks
- Pots for hand made glass industry

Technical Services Division

- Forehearth and distributor systems
- Forehearth and distributor combustion systems
- Forehearth and distributor control systems
- Special cord dispersal stirrer systems

Represented in the USA by Argent Enterprises Inc., +1-724-499-5800 or aeinc@windstream.net.

Plansee USA

Booth: E2

115 Constitution Blvd., Franklin, MA 02038
Phone: +1-508-553-3800
maggie.boyd@plansee.com | www.plansee.com

PLANSEE will be present at the Glass Problems Conference to discuss the features of their products. Whether its molybdenum glass melting electrodes, tank reinforcements or stirring and gobbing equipment, PLANSEE's leading edge technologies and high performance materials provide for an efficient glass melting process. For decades PLANSEE has significantly contributed to making glass production more effective and environmentally friendly. As the largest fully integrated partner worldwide for the glass industry, PLANSEE provides its customers with technically advanced designs manufactured from our high performance materials resulting in excellent corrosion resistances, coarse grain structure, and highest purity.

Poco Graphite

Booth: E28

300 Old Greenwood Rd., Decatur, TX 76234
Phone: +1-940-627-2121
larry_whittenburg@entegris.com | www.poco.com

Poco Graphite's precision ware handling solutions and unique GLASSMATE® graphite materials can improve performance in container glass production, reduce machine downtime and increase yields. POCO is known for its designs, particularly precision holders and inserts that allow fast accurate machine setup and insert replacement. Inserts are available as semi-finished blanks, or can be precision machined to a specific finish. POCO also offers graphite dead plate assemblies, lehr bars, sweep-out assemblies, and custom components. Application specialists can assist in the selection of the optimum graphite grade based on pickup, application, and length of the production run.

Praxair, Inc.

Booth: H17/H18

39 Old Ridgebury Rd., Danbury, CT 06810
Phone: +1-800-PRAXAIR
info@praxair.com | www.praxair.com

Praxair is a leader in innovative oxyfuel technologies for the glass industry. With over 70 years of oxyfuel combustion experience in the glass industry and over 200 oxyfuel projects completed worldwide, our technologies can deliver substantial fuel savings, increased productivity and product quality, reduced NOx emissions and alkali volatilization, and prolonged furnace campaign. Praxair is a Fortune 300 company. We also supply atmospheric, process and specialty gases, high performance coatings, and related services and technologies. Among the gases we supply are oxygen, nitrogen, argon, carbon dioxide, helium, and hydrogen.

Prodim USA

Booth: E5

7454 Commercial Circle, Ft. Pierce, FL 34951
Phone: +1-888-229-3328
jakeh@prodimusa.com | www.prodimusa.com

Prodim USA is the manufacturer of The Proliner. Proliner is a 2D and 3D Digital Measuring System. They are the fastest and easiest way for getting accurate dimensions on site, as well as digitizing existing shapes and objects. Each system

Gardner Denver, Inc.

Booth: E7

1800 Gardner Expressway, Quincy, IL 62305
Phone: +1-217-288-8243
www.gardnerdenverproducts.com

GEA Bischoff, GEA Process Engineering, Inc.

Booth: E21

GEA Process Engineering, 9165 Rumsey Rd., Columbia, MD 21045
Phone: +1-410-997-8700
gea.pe.na@geagroup.com | www.niroinc.com

GEA Bischoff offers a wide range of technologies in gas cleaning to get cleaner air with the Process industries. This includes dust collection, dry and wet processes for removing gaseous pollutants from process gases, separating heavy metals, abating acid gas, dioxins and furans and other emission-relevant off-gas components. GEA Bischoff is a part of the "Emission Control" business unit within the GEA Process Engineering segment.

Glass Service, Inc.

Booth: H13

3340 SE Federal Highway, #200, Stuart, FL 34997
Phone: +1-772 287 6061
info@glassserviceUSA.com | http://gsl.cz

Glass Service, Inc., (GS) is a leading global consultant in the field of glass melting and conditioning, furnace control, operation, troubleshooting, and optimization of furnace designs. The Expert System, ESIIITM, and the glass furnace modeling software known as GFM 4, have been developed by GS and are successfully deployed worldwide. Glass Service provides defect analyses in its own labs and utilizes basic and applied research in its glass melt testing facilities. Headquarters are located in the Czech Republic, with offices in the Netherlands, Slovakia, United States, and China. Co-exhibitor FlemmaTec supplies burners and combustion equipment to the glass industry.

Glassworks Hounsell Ltd.

Booth: E3

Park Lane, Halesowen, West Midlands B63 2QS UK
Phone: +44-1354 560 665
www.glassworkshounsell.co.uk

GMIC

Booth: E13/H14

600 N. Cleveland Ave., Suite 210, Westerville, OH 43082
Phone: +1-614-523-3033
dbanks@gmic.org | www.gmic.org

GMIC is a trade association of the glass industry that includes among its members, representatives of all four sectors: Flat, Container, Fiber and Specialty glass companies, as well as leading suppliers to the industry, research institutes and industry experts. Our goal is to promote the interests and growth of the glass industry.

H.C. Starck, Inc.

Booth: E15

45 Industrial Place, Newton, MA 02461 USA
Phone: +1-617-630-5800
info@hcstarck.com | www.hcstarck.com

H.C. Starck's innovative research, engineering development, manufacturing execution, and diverse product portfolio make it a leading manufacturer for the glass melting industry. H.C. Starck is one of the world's largest suppliers of the refractory metals: molybdenum, tungsten, tantalum, and niobium. Large diameter molybdenum tubing suitable for quartz melting vessels and orifice plates are extruded at its premier extrusion and forging facility. Fabricated products from molybdenum and tungsten include: glass melting electrodes, crucibles, extruded tubes, and other components. H.C. Starck's molybdenum, with its exceptional purity level (99.95% minimum), has outstanding resistance to chemical corrosion, degradation, and minimal detrimental glass discoloring.

Henry F. Teichmann, Inc.

Booth: Salon C

3009 Washington Rd., McMurray, PA 15317
Phone: +1-724-941-9550
customerinquiry@hft.com | www.hft.com

Henry F. Teichmann, Inc. is a world leading Glass Process Engineering Contractor dedicated solely to the glass industry. For 63 years, we have been providing turnkey projects that include engineering, procurement, technical service, construction and project management for clients worldwide. Those projects consist of complete float, fiberglass and container plants. Teichmann also provides those turnkey services for specialty plants such as sodium silicate, borosilicate tubing, television, tableware and lighting products. In addition to successfully converting TV glass furnaces and fiberglass furnaces to oxy-fuel firing, HFT has worked with PPG in converting two PPG float furnaces into oxy-fuel firing. Henry F. Teichmann, Inc. has teamed up with PPG to provide solutions and up-to-date float technologies, including oxy-fuel technology to the glass industry worldwide.



Conference on Glass Problems

October 1-3, 2012 • Hilton Cincinnati Netherland Plaza • Cincinnati, Oh

Heraeus Materials Technology

Booth: E27

Heraeusstr. 12-14, 63450 Hanau, Germany

Phone: +1-201-647-8672

john.lazzari@heraeus.com | www.heraeus.com

Heraeus specializes in the manufacture of platinum, gold, iridium, and specialty metal parts for the glass industry. With over 150 years of experience in precious metals and worldwide operations, Heraeus has the capability to provide the highest quality products in the most sophisticated designs. Items include stirrers, liners, electrodes, crucibles, cladding, and other custom designed parts, in high strength alloys and grain stabilized materials, specifically designed for glass manufacturing. All of our products are backed by our expertise and world-class technical support.

Hotwork USA

Booth: E24

223 Gold Rush Rd., Lexington, KY, USA 40503

Phone: +1-859-276-1570

hotwork@hotwork.com | www.hotwork.com

Worldwide supplier of glass furnace heating, expansion control supervision, regenerator sulfate burnouts, glass draining with hot water recycling, wet cullet filling, furnace cooldowns and hot pots, and electronic crown rise monitoring. The only continuous operating Hotwork heatup company since 1965 and proud sponsor of The Phoenix Award Committee.

Invensys Eurotherm

Booth: E11

44621 Guilford Dr., Suite 100, Ashburn, VA 20147

Phone: +1-703-724-7300

zywana.johnson@invensys.com | www.eurotherm.com

Invensys offers enterprise control systems for the glass industry, in addition to highly advanced process control solutions. Process control systems operate in a timescale appropriate to the production process, whereas Management Information Systems typically provide time delayed information. This delay seriously impacts the decision making process for both management and operators. Invensys enables the glass industry to transfer productivity data into information in a timely manner, thereby providing both management and operators information indicating real time profitability in a dashboard format. Invensys will discuss several offerings including Wonderware System

Platform, Eurotherm process control, Foxboro field devices and Avantis Asset Management.

Klug Systems by Optimization

Booth: H3

50 High Tech Dr., Rush, NY 14543

Phone: +1-585-321-2300

wendy.smith@optimization.us | www.optimization.us

Optimization is unique in its ability to provide complete engineering, automation, construction and maintenance services, from the conceptual stage, through prototyping, all the way to full-scale production operations. Optimization's multidiscipline engineers, designers and skilled tradespeople successfully deliver thousands of projects each year throughout the US and the world. Leveraging ISO-9001 and CSIA Best Practices, Optimization's complementary skill sets offer a single source for seamless, cost effective and timely project completion. Headquartered in Rochester, NY since 1985, with offices in Boston, Dallas, Denver, Houston, Keene, NH, Minneapolis, Philadelphia and Syracuse, we serve clients across a wide spectrum of industries.

Lilja Corp.

Booth: Salon F

229 Rickenbacker Circle, Livermore, CA 94551

Phone: +1-925-455-2300

msimmons@liljacorp.com | www.liljacorp.com

Lilja Corp. is an assertive leader in industrial and glass furnace construction. Our managers, supervisors and craftsman are known industry wide for their high standards, performing quality work, meeting project schedules and a commitment to a safe working environment. We are a full service general engineering contractor, specializing in the construction of processing, manufacturing and warehousing facilities, glass melting furnaces and all related systems and industries. Lilja Corp. has been serving the needs of the glass industry for over 35 years with offices located in the US and Canada.

Magneco/Metrel, Inc.

Booth: H1-2

223 W. Interstate Rd., Addison, IL 60101

Phone: +1-630-543-6660

marketing@magneco-metrel.com

www.magneco-metrel.com

Magneco/Metrel, Inc. is a privately owned manufacturer of specialty refractory monolithics that optimize availability and provide exceptional value to glass manufacturing applications.

McGill AirClean LLC

Booth: H4

1777 Refugee Rd., Columbus, OH 43207

Phone: +1-614-829-1200

sales@mcgillairclean.com | www.mcgillairclean.com

McGill AirClean has over 40 years of engineering and manufacturing experience helping companies meet stringent air pollution control regulations for boilers, furnaces, incinerators, and a variety of industrial processes in industries such as wood products, pulp and paper, automotive, chemical, pharmaceutical, food, metals, petrochemical, electrical power and steam generation, and solid waste incineration. We have extensive experience and a large number of installations for many types of glass applications. Products and services include dry and wet electrostatic precipitators, fabric filter systems, spray-dry scrubbers, regenerative thermal oxidizers, DeNOx (SCR) reactors, dry reagent injection systems, mobile testing services, and parts and services.

Mixer Systems, Inc.

Booth: E32

190 Simmons Ave., PO Box 10, Pewaukee, WI 53072

Phone: +1-262-691-3100

daveb@mixersystems.com | www.mixersystems.com

Founded in 1979, Mixer Systems, Inc. is dedicated to the design and manufacture of technology for the concrete products, industrial, environmental and glass markets. Manufacturer of the legendary Turbin Mixer, Mixer Systems is the largest maker of pan mixers in North America. Today, there are more than 3,000 Turbin Mixers in use worldwide.

Motim Fused Cast Refractories Ltd.

Booth: E25

H-9201 Mosonmagyaróvár, PO Box 29, Hungary

Phone: +1-845-544-7055

fusedcast@motim.hu | www.motim.hu

Motim Fused Cast Refractories Ltd. is recognized as a world leader producing fused cast AZS and alumina refractories, refractory castables. Our products are used in the glass manufacturing furnaces. More than 95% of our turnover

is from export sales. Our traditional markets are Western and Central Europe, but we are present with our products on all continents of the World. Represented in the USA by Argent Enterprises Inc., +1-724-499-5800 or aeinc@windstream.net.

Nikolaus Sorg GmbH & Co. KG

Booth: E36

Stoltestr, 23 D-97816 Lohr am Main, Germany

Phone: +1-724-366-6513

ulmer@sorg.de | www.sorg.de

The SORG Group through their member companies can supply turnkey installations from raw material delivery through the glass gob globally. This includes all aspects of the furnace lifetime cycle. From sustainable designs, construction, services, repairs, through demolition at the end of the campaign. SORG through EME, Nikolaus Sorg GmbH & Co. KG, and SKS delivers Made In Germany solutions to all sectors of the glass industry globally. Our latest products include the BATCH3 system comprising often the IRD® Doghouse, EME-NEND® charger and the proven Sorg® Batch Preheating system.

North American Refractories

Booth: H16

400 Fairway Dr., Moon Township, PA 15108

Phone: +1-412-375-6600

glassinfo@naref.com | www.anhrefractories.com

North American Refractories Company engineers, manufactures and supplies a full-line of refractories to support the most demanding glass making applications. NARCO's experienced Installation Group provides the Glass Industry with high quality hot and cold repair service as well as hot sealing of new furnaces. Our Glass Support Team is located in Pittsburgh, PA and Cincinnati, OH with Sales Representatives that cover the United States, Latin America, South America, Europe and Asia. Our Glass Support Team works closely with each customer to ensure the best possible refractory solutions are met. We have 17 plant locations in the United States, 1 in the United Kingdom, 1 in Mexico, 1 in China, and 1 in Indonesia.