

POWER-GEN NEW ORLEANS NOVEMBER 18-21

APC AND VALVE TOUR GUIDES

OVERVIEW

Power-Gen has a number of courses, speeches and exhibits with useful information about air pollution control and valves. The following tour guides are to assist decision makers in their scheduling. This guide will be continually updated until November 16 and the latest version will be on display at

http://www.mcilvainecompany.com/PowerGen_2019/Power-Gen_2019_Information.pdf

There are two purposes

- Help suppliers with programs to pursue the international market.
- Help end users make lowest cost of ownership decisions.

Helping suppliers pursue the international market: McIlvaine and three other speakers will conduct a course for suppliers on Monday afternoon on ways to pursue international markets. One of the recommendations will be that suppliers analyze the exhibition activity at Power-Gen Asia, Power-Gen India and other exhibitions. The tour guides are a valuable resource for this purpose.

There is a guide on resources for air pollution control and valves generally. But there are also some special guides which include

- Dry and wet FGD scrubbers
- Electrostatic Precipitators upgrades
- Turbine bypass valves
- Gas Turbine Inlet Filters

DRY AND WET FGD SCRUBBERS

GPU 304 workshop will cover the big market for wet and dry FGD scrubbers and components in India and provide details on ways for international suppliers to pursue this market. It will explore the potential for the Dry Scrubber Users Group to collaborate with **Mission Energy** for a U.S.-India information exchange.

Sessions: Cycling Load, Dual Fuel Firing, and Understanding Operating and Maintenance Savings for Air Quality Control Systems will be presented by Suzette Puski, Business Development Manager, **Babcock Power Environment**. This company has a partner and its first wet FGD order in India.

Exhibitors: **AECOM** has a license from **Linde** to use ozone to capture NO_x in FGD scrubbers. **Boldrocchi** supplies DSI systems. **Burns & McDonnell** participated in the India SO_x-NO_x conference. **CECO** supplies FGD dampers. **Duechting** supplies FGD pumps. **Emerson** provides slurry level control and automation. **Hamon** provides FGD systems. **Haynes** provides alloys for

scrubber vessels and components. **Howden** provides FGD exhaust fans and oxidation blowers. **Southern Environmental** supplies dry scrubber systems. **Teledyne Monitor Labs** supplies FGD CEMS as does **Thermo Fisher**. **Wood** has acquired the **Wheelabrator** APC and wet FGD systems. **WSP** is a worldwide consultant on power plant systems. We will be continually updating the following directory of attendees, exhibitors and speakers who are interested in discussing dry and wet FGD.

Company Name	Last Name	First Name	Mobile	Email
Duechting	Vines	Josh	(479) 668-4929	Josh.Vines@duechting.com
Duechting	Wilson	Daniel	(479) 668-4929	Daniel.Wilson@duechting.com
Descriptor of FGD-related activities or questions				
xxxx	xxxx	xxx	xxxx	xxxx

Issues to be discussed:

- Limestone forced oxidation with gypsum vs. lime natural oxidation and chemical fixation
- DSI vs. SDA vs. CFB (CDS) dry systems
- Oxidation blower options
- Ceramic vs. rubber vs. alloy pump materials
- Slurry level control for calcium sulfite
- SO₂ measurement for process control as well as regulatory compliance
- Vacuum filter belts and filter options

ELECTROSTATIC PRECIPITATOR UPGRADES

GPU 304 will use precipitator controls as an example of the potential to penetrate the Indian market where more than 100,000 MW of power plant precipitators will have to be upgraded for higher efficiency.

Sessions: None of the sessions will directly address the precipitator upgrade question.

Exhibitors: **CECO** - AVC supplies precipitator controls. **Doosan** provides precipitator control systems. **Hamon** provides precipitators and control systems. **R&R Beth** provides precipitators and control systems. **Southern Environmental** provides precipitators and control systems. **Wood** acquired **Wheelabrator** which supplies precipitators and controls.

We will continually be creating the following directory of attendees, exhibitors and speakers who are interested in discussing precipitator upgrades.

Company Name	Last Name	First Name	Mobile	Email
KraftPowercon	Leanza	Paul	(850) 341-3972	paulleanza@kraftpowercon.com
KraftPowercon	Holt	Dan	(850) 495- 1159	Danholt@kraftpowercon.com
KraftPowercon's offers precipitator power supplies, controls and accessories. PCS's precipitator consulting services provide customized solutions and services.				

Issues to be discussed.

We will be adding to this list over the next few weeks. One effort will be to compare various power supply options, including the high voltage microsecond approach.

TURBINE BYPASS VALVES

The GU 304 workshop will use turbine bypass valves as an example and include information on the new **Indian Valve Association**.

The GU 303 workshop on turbine controls and improved frequency response will provide insights on bypass valve requirements.

Speeches include:

Operational Flexibility of Gas Turbine Power Plants

[HRSG and SCR Performance Optimization](#)

Stands include: **AECOM**, **Adams Valve**, **A-T Controls**, **Black & Veatch**, **Bray**, **Burns & McDonnell**, **Clarke**, **Co-Ax**, **Conval**, **Doosan**, **Emerson**, **JASC**, **SPX**, **Wood**.

In order to maximize information sharing, we will list email and mobile phone contacts for people who have information to provide or questions to ask about turbine bypass valves.

The following attendees also have information to share.

Company Name	Last Name	First Name	Mobile	Email
BHGE	TBD	xxxx	xxxx	xxxx
BHGE is a major supplier of turbine bypass valves				
xxxx	xxxx	xxx	xxxx	xxxx

Issues to be discussed:

Noise

Plug valve sticking

Leakage

Optimal bypass % range

Reaction time

Materials for LP vs. HP vs. new conditions, such as cycling or ultrasupercritical conditions

Multi-stage pressure reduction to reduce trim wear

Stellite delamination

Flow accelerated corrosion

Maximizing power output

GAS TURBINE INLET FILTERS

The GU 304 workshop will use **DHA** as an example of how two U.S. companies are collaborating with a large international media manufacturer.

Speeches: None are directly applicable although Mitchell Krasnopoler of **Kiewit** will be speaking about air emissions and can address the fact that with HEPA filter gas turbine inlets the outlets are reduced below requirements in California where ambient air levels exceed emission limits

Stands: The only stand displaying gas turbine inlet filters is DHA stand 1331.

Issues to be Discussed: DHA will be displaying a rugged cleanable HEPA filter. The debate has centered on whether the theoretical value of lower maintenance with the HEPA filter is worth the higher cost. The argument against the HEPA filter has been fragility.

Company Name	Last Name	First Name	Mobile	Email
DHA	Vipperman	Joe	571 259 5840	joe@dhafilter.com
DHA	Hanna	Jeff	904 614 7226	jeff@dhafilter.com
DHA is a supplier of high efficiency cleanable gas turbine intake filters				
IAM	Douglas	Jerry	xxxx	jdouglas@innovativeairmgt.com

A number of other issues are outlined in the Gas Turbine Inlet Filtration Guide, which can be viewed at

http://www.mcilvainecompany.com/Decision_Tree/subscriber/Tree/DescriptionTextLinks/Gas_turbine_inlet_filter_decision_guide_april_26830.pdf

RELEVANT WORKSHOPS AND SESSIONS

WORKSHOPS

GU 304: Business Opportunities in Emerging International Power Markets

- Room: 240-241 Session Number: PGU304 Monday, November 18, 2019: 1:00 PM - 5:00 PM

Instructor

Bob McIlvaine - President and Founder of McIlvaine Company

Instructor

Deepak Khajouria - Partner, AVP Group

Instructor+

Scott Affelt - President, XMPLR Energy

Instructor

Thanga Jawahar Kalidoss - Global Head, Business Solutions & Tech., TATA Consultancy Services, India

The course will present a framework to develop an emerging market entry strategy, various ways one can enter the market and lessons learned by other companies. We will present opportunity and market analysis for various fossil plant equipment for a few high growth markets such as South Asia (e.g. India), Southeast Asia (e.g. Indonesia, Malaysia, Thailand) and the Middle East that are especially interested in western technology. The workshop will not focus on more established Asian markets such as China, Japan and South Korea. The challenges of entering these emerging markets will be explored with specific emphasis on selecting the right customers, with the right set of solutions and selling through the right channels.

Learning objectives:

- A process for developing a Go-to-Market plan for these markets will be introduced with discussion on four key elements: 1) Value Proposition; 2) Targets; 3) Channels; and 4) Promotion. All four elements must be addressed and executed well for the market entry to be successful.

Upon completion of this course attendees will:

- Learn to develop ideal targeting criteria.
- Understand collaboration needed to create and validate a clear value proposition early in the process.
- Know how to manage and move the process forward (both internally or externally).
- Learn how to create a simple account strategy/map; and consider various means to enter new markets (such as direct sales, partnering and/or licensing).
- Know how to establish an effective/competitive supply chain in the local market.

GU 303: Modern Boiler-turbine Control Strategies and Tuning for Improved Ramping and Frequency Response

- Room: 230, Session Number: PGU303, Monday, November 18, 2019: 1:00 PM - 5:00 PM

Speaker(s)

Instructor+

Don Parker, M. Eng
Principal Engineer/ President
Provecta Process Automation LLC
United States

Instructor

Neil Ronan, BEng, IntPE(Aus)
Principal Engineer
Provecta Process Automation, LLC
United States

This course introduces thermal power plant processes and dynamics that are impacted by efforts to improve ramp rates, widen operating load ranges and provide frequency response services, and describes control strategies and tuning methods to improve ramping performance. For coal-fired plants, impacts include increased component thermal stress, steam temperature and pressure excursions, reduced efficiency and load- following accuracy, and low-load limits imposed by emissions reduction equipment.

Learning Objectives:

- Understand how boiler and turbine dynamics affect unit ramping and load range capability.
- Learn how modern design elements are available to improve performance.
- Techniques to test and measure process responses and to enhance and tune control system components to improve ramping performance.

Upon completing this course attendees will:

- Gain an understanding of boiler/fuel systems/turbine dynamics and process interactions with actual plant examples and simulation demonstrations.
- Be able to describe features of the main standard modes of boiler/turbine coordinated control and boiler air, fuel and feedwater systems, and for once-through boiler feedwater control, both traditional and enthalpy-based approaches.
- Be introduced to model-based enhancements to improve ramping performance including dynamic setpoint modification, feedforward structures, steam temperature control improvements and stabilizing elements.
- Learn procedures and be provided with excel-based tools to conduct systematic control tuning to improve ramping performance.
- Understand turbine governor responses in various control modes and control designs to improve frequency response capability. Advanced designs such as condensate throttling to provide frequency response with throttle valves wide open will be introduced.

SESSIONS

Session 3C: Operational Flexibility of Gas Turbine Power Plants

- Room: 245 Session Number: 3C Wednesday, November 20, 2019: 1:00 PM - 2:30 PM

Session Co-Chair

Jeff Hatfield

Director, Business Development

Zachry Group

United States

Session Chair

Mitchell Krasnopoler

Manager, Air Quality

Kiewit

United States

Emerging renewable energy resources are disrupting the power market, which is requiring generators to look for more operational flexibility. This session will discuss the newest innovation to allow greater plant flexibility.

[Session 6B: HRSG and SCR Performance Optimization](#)

- Room: 240-241

Format: Paper

Options and solutions for addressing current demands on frequent cycling operation for HRSGs.

Session Chair

Sanjeev Jolly, P.E.
Sr. Engineer, Engineering Services
NAES Corp.
United States

Session Co-Chair

John Grusha
Director - Combustion Systems & Product Development
R-V Industries, Inc.
United States

[Session 7A: Challenges and Sustainability of Coal Fired Generation](#)

- Room: 242

Format: Paper

This session will focus on existing coal-fired generation, much of which has increasingly restricted budgets for maintenance and upgrades. Topics will focus on practical strategies for optimizing and sustaining the performance

Session Chair

Stephen Henson
Manager Engineering
Eversource
United States

Session Co-Chair

Mark Barton
Plant Manager
Public Service Co. of Oklahoma
United States

[Cycling Load, Dual Fuel Firing, and Understanding Operating and Maintenance Savings for Air Quality Control Systems](#)

Speaker

Suzette Puski
Business Development Manager
Babcock Power Environmental
United States

[Coal 2030: Is There A Light at the End of the Tunnel Or Is It An Oncoming Train?](#)

Speaker

Una Nowling, P.E., M.Sc.

Technology Leader, Fuels & Reliability

Black & Veatch

United States

Co-Author

Laura Shafer

Asset Management Specialist

Black & Veatch Corporation

United States

[Reclaiming and Recycling Coal Fly Ash for Beneficial Use](#)

Speaker

William Fedorka, P.E.

Vice President, Engineering and Projects

The SEFA Group

United States

[Session 7B: Operating Challenges of Cycling the Modern Coal Fleet](#)

- Room: 242

Format: Panel

This high-level panel discussion will cover the challenges faced by utilities operating coal-fired generation and the strategies needed to remain competitive in a fast-changing market. The conversation will include staffing challenges, technology adoption, operational flexibility, reliability, capital and environmental restrictions.

Moderator

Brandon Bell

Senior Vice President of Operations

Valdes Engineering Company

United States

Panelist

Jerry Meissner
Manager – Power Generation Plant Projects
We Energies and Wisconsin Public Service
United States

Panelist

Kyle Lewis
Unit Director
La Cygne
United States

Panelist

Rudy Navarro
Plant Manager - Coronado Generating Station
SRP

RELEVANT EXHIBITS

AECOM

Princeton, NJ
United States
<http://www.aecom.com>

- Booth: 2511

AECOM is a single-point contractor for grassroots, retrofit, and expansion projects in nuclear, fossil, and T&D. Our expertise spans front-end studies, consulting, program/project management, engineering, procurement, construction or construction management, startup, and operating unit support.

Products: engineering, construction, startup, environmental, nuclear, air quality, combined cycle, simple cycle, operating plants, maintenance, modification, conversion, transmission, substation, cogeneration

ADAMS VALVES INC.

Houston, TX
United States

- Booth: 2230

AERINOX INC.

Eaton, CO

United States

<http://www.aerinox-inc.com>

- Booth 1455

AeriNOx supplies reliable and durable emissions solutions to stationary diesel and natural gas engine markets. Our highly integrated systems reduce NO_x and other engine emissions up to 98%, with products custom-engineered to each customer's application.

Products: SCR, DPF, Urea, Ammonia, Oxidation Catalyst

AIRPRO FAN & BLOWER COMPANY

Rhineland, WI

United States

<https://airprofan.com>

- Booth: 433

AirPro Fan & Blower Company is an employee-owned, engineer-operated manufacturer of industrial-duty centrifugal fans, blowers, parts, & accessories.

AirPro's general operating capabilities include horsepower up to 1000, pressures up to 145"wg, operating temps up to 1,700°F, & flow rates up to 350,000 CFM.

Instant fan selection & pricing are available on myAirPro, the world's fastest fan selector for engineers, along with equipment drawings and performance data.

Products: Backward Inclined, Backward Curved, Centrifugal Radial Tipped, Heavy Duty & Industrial Exhaust, High Pressure, High Temperature Plug, API 673 & 560

APOLLO VALVES

Matthews, NC

United States

<http://www.apollovalves.com>

- Booth: 3413

A-T CONTROLS INC

Cincinnati, OH

United States

<http://www.atcontrols.com>

- Booth: 3319

A-T Controls, Inc. is a global leader in the manufacturing and sale of Manual & Automated Process Valves. With strong Engineering and Application expertise, and an unparalleled inventory, A-T Controls is ready to provide the highest quality products and Automated Valve Packages with the fastest turn-around time in the industry.

Visit us at Booth #3071 to learn more about our broad range of Soft Seated, Multiport, Metal Seated, Butterfly, High-Performance Butterfly, V-Port and Segment Control Valves; and the Industry's finest line of TRIAC® Pneumatic and Electric Actuators and Control Accessories for Quarter-Turn Valve and Damper Drive Installations. A-T Controls is simply "The Best in the Industry". For more information please call (513) 247-5465 or visit www.atcontrols.com

BLACK & VEATCH CORPORATION

Overland Park, KS

United States

- Booth: 2039

BOLDROCCHI NORTH AMERICA

Kennesaw, United States

Georgia

<http://www.boldrocchigroup.com>

- Booth: 1811

Brands: BOLDROCCHI North America - Air Pollution Control Equipment, Scrubbers, Fabric Filters, SCR & SNCR, ACI & DSI Systems, Fans, Dampers, Heat Exchangers etc. - Equipment Supply & Turnkey Solutions

BRAY INTERNATIONAL, INC

Houston, TX

United States

<http://www.bray.com>

- Booth: 3725

At **Bray International, Inc.**, our business is helping our customers with their flow control requirements. Our modular product line of valves, actuators and accessories offer the best compatibility, economy and quality performance in the flow control industry.

Brands: Bray Controls, Flow-Tek, Ritepro, Tri Lok

BURNS & McDONNELL

Kansas City, MO

United States

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

- Booth: 4125

Burns & McDonnell is a full-service engineering, architecture, construction, environmental and consulting solutions firm. We plan, design, permit, construct and manage facilities all over the world.

CECO ENVIRONMENTAL

Dallas, TX

United States

<https://www.cecoenviro.com/brands>

- Booth: 1609

Brands: Ceco Environmental, Ceco Effox-Flextor, Ceco Peerless, Ceco Aarding

CHAMPION VALVES INC

Wilmington, NC

United States

<http://www.wafercheck.com>

- Booth: 4225

Find out more about Champion Valves at www.wafercheck.com

Champion Valves is located in beautiful Wilmington, NC. The office and warehouse facility is dedicated to meeting your needs with a complete range of high-quality and competitively priced check valves. We maintain a large inventory of finished check valves, backed by exceptional customer service.

Brands: CVR Dual Disc Wafer Check SDR Single Disc Wafer Check NZ Axial Flow Nozzle Globe Check NZW Axial Flow Nozzle Wafer Check SCW Silent Wafer Check SCG Silent Globe Check SCT Silent Threaded Check

CLARKE VALVE

North Kingstown, RI
United States

- Booth: 2956

CO-AX VALVES INC. & QUADAX VALVES INC.

Bristol, PA
United States

- Booth: 4624

Quadax Valves Inc. and Co-Ax Valves Inc., based in Bristol, Pennsylvania, is part of the Müller Co-Ax ag group, a world-renowned valve manufacturer since 1960.

For over 50 years, Müller Co-Ax ag has been an innovative leader in the unique design and manufacture of valve technology for businesses worldwide.
quadaxvalves.com - coaxvalves.com

Brands: Co-ax Valves Inc, Quadax Valves Inc.

CONVAL, INC.

Somers, CT
United States
<http://www.conval.com>

- Booth: 2918

Celebrating its 50th anniversary in 2017. Conval manufactures and markets U.S.-made, high-performance severe service Clampseal globe and Camseal metal-seated ball valves for a variety of power generation applications. Please meet us today at booth 5118 and visit us online at Conval.com.

Brands: Clampseal, Camseal, Swivldisc, Whisperjet

DCL AMERICA

Oak Ridge North, TX
United States
<http://www.dcl-inc.com>

- Booth: 1457

DCL is a global leader in the design, manufacture and implementation of advanced emission control systems.

DCL's product offering includes catalytic converters, catalytic mufflers, engineered silencers, DPFs, replacement catalyst elements, heat recovery and siloxane cleanup solutions.

Brands: Brand names from DCL include MINE-X[®], MINE-X SOOTFILTER[®] and QUICK-LID[®].

DOOSAN HEAVY INDUSTRIES

Seoul, Korea (South)

<http://www.doosanheavy.com>

- Booth: 1209

Doosan Heavy Industries & Construction owns core technologies and experiences in power generation business - EPC, boilers, turbines and generators. With Doosan Babcock (U.K.), Doosan Skoda Power (Czech Republic) and Doosan Lentjes (Germany), Doosan reinforced its competitiveness. Doosan also develops clean power including wind power and fuel cell.

DÜCHTING PUMPS

Fort Smith, AR

United States

<http://www.DUECHTING.com/en>

- Booth: 2020

DÜCHTING PUMPEN is a privately owned, 3rd generation German company with 80 years of experience in the field of advanced centrifugal pumps for use in Flue-Gas Desulfurization, Boiler Feed Water, Seawater Desalination, Mining and Chemical industries.

Products: Corrosive/Abrasive Services, Silicon-Carbide Slurry Pumps, Metallic Slurry Pumps, Boiler Feed Pumps, Silicon-Carbide Coatings, Pump/Equipment Coating Repairs, Gypsum/Limestone Slurry, Ash Handling

EMERSON

Bloomington, MN

United States

- Booth: 2826

F.O.S. INDUSTRIAL FILTER TECHNOLOGY, INC.

Quincy, MA

United States

<http://www.fos-filtertec.com/>

- Booth: 4718

The F.O.S. Group offers comprehensive services related to all aspects of dedusting technology – combined with considerable expertise and personal commitment for sustainable environmental and climate protection.

Brands: F.O.S. On-Line Cleaning® F.O.S. Pulse Cleaning® F.O.S. Power Cleaning®

GLOBAL EMISSIONS SYSTEMS INC. (GESi®)

WHITBY, ON CANADA

<http://www.gesi.us>

- Booth: 849

Global Emissions Systems Inc., (GESi®) designs, engineers, and manufactures, patented and proprietary emission reduction technologies designed for any engine using gasoline, propane, natural gas, diesel, bio-diesel landfill methane, bio-gas, or synthetic fuels. Products are verified and certified by the US EPA, CARB, MSHA, ETV, CARB and Euro.

Brands: GESi® Global Emissions Systems, emission controls, emission reduction, catalytic converter, NOx, NMHC, CO, PM, DOC, DPF, NSCR, three-way catalyst, SCR, rich burn, lean burn, EPA, CARB, MSHA, ETV.

HAMON

Somerville, NJ

United States

- Booth: 1725

Hamon Corporation, is an equipment manufacturer and construction company serving the Power and Oil & Gas markets. It provides Chimneys, HRSGs, Industrial Boilers, Precipitators, Fabric Filters, Multi-pollutant Systems (ReACT), Scrubbers, Urea-to-Ammonia Systems, and Cooling Systems.

Products: Air Pollution Control; ESP; Fabric Filters; ReACT; Flue Gas Desulfurization; DeNOx; U2A; Wet Gas Scrubbers; Heat Recovery Steam Generators; Chimneys and Cooling Systems.

HAYNES INTERNATIONAL INC

Kokomo, IN
United States
<http://www.haynesintl.com>

- Booth: 3231

Haynes International is a developer, manufacturer, and distributor of HASTELLOY^(R) and HAYNES^(R) alloys used in high-temperature and corrosion applications. Standard products include sheet and plate, pipe and tube, wire and welding products, bar, and fittings and flanges. They also offer value-added services worldwide. They have more than 100 years of experience in the high-performance alloy industry.

HORIZON VALVE SERVICES INC

Hominy, OK
United States
<http://horizonvalve.com>

- Booth: 3655

HOWDEN

Depew, NY
United States
<https://www.howden.com/en-us>

Howden provides FGD fans for power plants around the world and also provides oxidation blowers to convert calcium sulfite to sulfate.

- Booth: 4250

HUG ENGINEERING INC.

Buford, GA
United States
<http://www.hug-engineering.com>

- Booth: 438

Hug Engineering has over 30 years of experience in the design, development, manufacture, and application of exhaust gas treatment systems for reciprocating engines firing natural gas, biogas, diesel, crude oil, HFO, or dual fuels. Hug's technology is capable of reaching ultra-low NOx emissions (<5 ppm) with near zero ammonia slip, even on challenging transient applications with

CEMs installed requiring continuous emissions compliance. Applications range from standard installations for single pollutant control to systems in non-attainment areas requiring ultra-low NO_x, CO, VOC, and NH₃ slip control. With systems on over 10,000 MWs of installed capacity, Hug has the experience and technology to make your project a success.

JASC-CONTROLS

Tempe, AZ
United States
<http://www.jasc-controls.com>

- Booth: 1004

JASC provides process control improvements for any industry. We evaluate system or sub-system performance and develop patentable designs to maximize productivity. Our ability to manufacture hardware, as required, provides comprehensive solutions for the most challenging operational problems.

Products: Valves, Water Injection, Purge Air, Monitoring Protection Systems, liquid fuel check valves, water-cooled check valves.

NEW YORK BLOWER COMPANY

Willowbrook, IL
United States
<http://www.nyb.com>

- Booth: 1619

New York Blower manufactures industrial fans and blowers.

The New York Blower Company manufactures fans and blowers to the power, API, nuclear, industrial and OEM marketplaces. NYB and SSM Industries provide filtration decommissioning skids to the nuclear industry. Together, we can provide design, qualification, fabrication, and installation support to utilities in today's nuclear market. For more information, visit www.nyb.com or www.ssmi.biz.

Products: fans, blowers, industrial, nuclear, API, decommissioning, AG-1 qualified supplier, ISO 9000, centrifugal, axial, high pressure exhaust, air handling units, dampers, NQA-1, ASME N509.

R&R BETH FILTRATION

Atlanta, GA
United States

<http://rr-bethfiltration.com>

- Booth: 1026

R&R BETH Filtration an international Company specialized in Filter and Extraction Technology. R&R BETH Filtration provides various types of Electrostatic Precipitators and Baghouse Filters for the flue gas cleaning. We design, produce and install both individual subassemblies and entire turnkey systems.

Products: ESP, electrostatic precipitator, flue gas filter, filter, filtration, dust collector, cyclones, R&R BETH Filtration, baghouse filter, Piping, Ducting, wet scrubbers, dust collector accessories.

ROBINSON FANS INC

Zelienople, PA
United States

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

- Booth: 4122

Robinson Fans manufactures custom engineered and designed industrial fans to meet the needs of your business' application. We have more than 100 years of experience in building air movement solutions and create the highest quality and most reliable industrial fans with exacting precision.

Products: Custom, Industrial Fans, Air Solutions, Services

RUHRPUMPEN, INC

Tulsa, OK
United States

- Booth: 831

Ruhrpumpen is an innovative and efficient pump technology company that offers highly-engineered and standard **pumping solutions** for the oil & gas, power generation, industrial, water and chemical markets. They offer a broad range of **centrifugal and reciprocating pumps** that meet and exceed the requirements of the most demanding quality specifications and industry standards such as API, ANSI, UL, FM, ISO and HI.

Products: centrifugal pumps, Ruhrpumpen, power generation, pumps, innovative, pumping solutions, pumping technology.

SOUTHERN ENVIRONMENTAL, INC.

Pensacola, FL

United States

<https://www.southernenvironmental.com/>

- Booth: 3504

Southern Environmental, Inc. serves the power market by providing *Multiple-HAPS* control equipment with *single source emission guarantees* for its clients. As a Self-Performing Design and Erect Contractor, SEI solutions are the most cost effective in the market.

SPX FLOW, Inc.

Charlotte, NC

United States

<http://www.spxflow.com>

- Booth: 811

SPX FLOW is a leading global supplier of highly engineered flow components, process equipment, and related aftermarket parts, focused on providing solutions that support the growing demand for more sustainable energy and power.

Products: Pumps, Valves, Filtration, Heat Exchangers, Hydraulic Tools, APV, Bolting Systems, Bran+Luebbe, ClydeUnion Pumps, Copes-Vulcan, Dollinger, Plenty, Power Team.

TELEDYNE MONITOR LABS

Englewood, CO

United States

<http://www.teledyne-ml.com/>

- Booth: 3151

Teledyne Monitor Labs is a leading supplier of environmental monitoring instrumentation for the detection, measurement, and reporting of air pollutants. They have over 40 years of experience providing state-of-the-art Continuous Emissions Monitoring products to a wide variety of industrial markets.

THERMO FISHER SCIENTIFIC

Austin, TX
United States

- Booth: 709

By helping our customers solve complex analytical challenges, Thermo Scientific™ Niton™ handheld XRF and LIBS analyzers bring your lab to the field. In the power generation industry, inspectors require top confidence in material analysis. Niton elemental analyzers offer superior detection limits and rapid results to ensure confident decision making. To learn more, visit thermofisher.com/PMI.

Brands: Thermo Scientific™ Niton™ Apollo™ Handheld LIBS Analyzer, Thermo Scientific™ Niton™ XL5 Handheld XRF Analyzer, Thermo Scientific™ Niton™ XL2 Plus Handheld XRF Analyzer.

TIGER VALVE COMPANY

Houston, TX
United States

- Booth: 242

TITAN FLOW CONTROL INC

Lumberton, NC
United States
<http://www.titanfci.com>

- Booth: 1319

Titan Flow Control, Inc. is proud to manufacture high quality check valves, y-strainers, basket strainers, duplex strainers, butterfly valves, pump protection products, fabricated products, and other pipeline accessories for commercial and industrial applications.

Products: Strainer, Check Valve, Hayward, Mueller, Flow Control, Pipeline, Valves, Y, Wye Strainer, Basket Strainer, Duplex Strainer, Foot Valve, Suction Diffuser, Ball Valves, Control Check.

UNIPER

Düsseldorf, Germany

<https://www.uniper.energy/services/>

- Booth: 3711

Uniper Energy Services supports you adapting to the market by increasing plant flexibility, enabling digital plant management and optimizing solutions for all types of energy generation projects including renewables. Independent of OEMs and with 100 years international experience we manage risk, reduce costs and improve your plant operations.

Products: Flexible operations, digital plant management, through-life services, asset optimization, OEM independence, consultancy, engineering, software, analysis.

UNITED VALVE

Houston, TX

United States

<http://www.unitedvalve.com>

- Booth: 3146

Through alliances and partnerships with 28 of the world's top valve manufacturers, United Valve provides factory authorized valve modifications and repair services to a broad spectrum of distributors and end-users. Our 60,000 sq. ft. facility is located in Houston, Texas, in the heart of the Texas refining and petrochemical belt.

The shop is equipped with state-of-the-art machining, welding, pressure testing and non-destructive evaluation equipment. From X-ray radiography to CNC machining equipment, United Valve is vertically integrated to handle virtually any type of valve service in-house, with work performed by an experienced staff of technicians and craftsmen. Four overhead bridge cranes with a 25' hook height enable us to handle valves up to 30 tons.

VICTAULIC

Easton, PA

United States

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

- Booth: 2530

As the world's leading producer of grooved mechanical pipe joining systems, Victaulic works collaboratively with its customers and affiliates worldwide to deliver innovative solutions across our core business areas. Our products and services put people to work faster while increasing safety, ensuring reliability and maximizing efficiency and sustainability.

WOLF POINT ENGINEERS & CONTRACTORS

Chicago, IL
United States

<http://www.wolfpointengineers.com>

- Booth: 2013

Wolf Point Engineers provides turn-key bulk material handling solutions for the power generating industry. Typical systems involve coal, pet coke, limestone, gypsum and wood chip handling. All projects involve engineering, procurement and construction services.

WOOD

Tucker, GA
United States

<https://www.woodplc.com/>

- Booth: 3719

Wood is a global leader in the delivery of project, engineering and technical services to energy and industrial markets. We operate in more than 60 countries, employing around 55,000 people, with revenues of over \$11 billion. We provide performance-driven solutions throughout the asset life-cycle, from concept to decommissioning across a broad range of industrial markets including the upstream, midstream and downstream oil & gas, chemicals, environment and infrastructure, power & process, clean energy, mining and general industrial sectors.

WSP USA

Lawrenceville, NJ
United States

<http://www.wsp-pb.com/en/WSP-USA>

- Booth: 3619

WSP's Energy sector is best known for technical innovation and the demonstrated commercial success we achieve for our clients. As the global power generation, power delivery, and renewables arm of WSP, we deliver power sector engineering and project management services to clients worldwide, including developers, lenders, utilities, contractors and government agencies. Consistently ranked by *Engineering News-Record* as a Top 15 Worldwide Power Engineering Firm, our expertise in power generation encompasses conventional coal, oil, gas-fired, hydroelectric, and geothermal utility- and industrial-level power plants and alternative fuels ranging from municipal waste, wood, landfill gas and agricultural by-products, and renewables such as on-shore and off-shore wind and solar.