

AUXILIARY EQUIPMENT / FILTRATION	COMPRESSOR MAINTENANCE	ELECTRICAL AND IGNITION EQUIPMENT
Room 324	Room 325	Room 326
Tuesday	Tuesday	Tuesday
1:00 - 2:30	1:00 - 2:30	1:00 - 2:30
	Compressor Theory <i>Randy Dal Molin & Stephen Woodstock, Hoerbiger</i>	Ignition Systems *ROUNDTABLE* <i>Michael Porter, Paul McHenry, Hoerbiger/Altronic; Pat Runnels, Darrell Schmitt, FW Murphy</i>
2:40 - 4:10	2:40 - 4:10	2:40 - 4:10
Gas Heating Equipment Design <i>Daniel Huffaker, Total Products Services</i>	Recip Compressor Packing, Vents and Drains <i>John Dunaway, Cook Compression</i>	Spark Plugs & Ignition Accessories <i>Ken Blanchard, Stitt; Charles Chewning, Champion; Alain LeFloch, BG Services</i>
Wednesday	Wednesday	Wednesday
8:00 - 9:30	8:00 - 9:30	8:00 - 9:30
DFT Inc. - Axial Flow Check Valves <i>Steve Calvert, DFT Valves</i>	Recip Compressors, Protection and Condition Monitoring <i>John Kingham, Bently Nevada, a BHGE Co.</i>	Safety Instrumented Solutions for Today's Challenges <i>Scott Pierce, United Electric Controls</i>
9:40 - 11:10	9:40 - 11:10	9:40 - 11:10
Keeping Contaminants Out of Compressors, Facilities & Pipelines Pt I <i>Bill Couch, Parker Hannifin</i>	Trouble Shooting Screw Compressors <i>Lee Levisay, The PROS Company</i>	EICS - Engine Integrated Control System <i>Pat Runnels, Darrel Schmitt, FW Murphy</i>
1:00 - 2:30	1:00 - 2:30	1:00 - 2:30
Keeping Contaminants Out of Compressors, Facilities & Pipelines Pt II <i>Bill Couch, Parker Hannifin</i>	Compressor Maintenance Frames & Components *ROUNDTABLE* <i>Aaron Hite, Ariel Corp; Vic Campanelli, Potemkin; Mike Roy, Crestwood; Derek Hughes, Antero; Matt Gilbert, Siemens</i>	Electrical Hazardous Area Classification <i>George Samo, Equitrans Midstream</i>
2:40 - 4:10	2:40 - 4:10	2:40 - 4:10
Gas Heating Equipment Maintenance <i>Daniel Huffaker, Total Products Services</i>	Compressor Maintenance Cylinders & Components *ROUNDTABLE* <i>Stephen Woodstock, Hoerbiger; Mike Roy, Crestwood; Jose Llamas, Ariel; Vic Campanelli,</i>	Post-Catalyst Feedback and Control <i>Michael Young, Hoerbiger/Altronic</i>
Thursday	Thursday	Thursday
8:00 - 9:30	8:00 - 9:30	8:00 - 9:30
	Compressor Value Short Course Part I <i>Stephen Woodstock, Hoerbiger; Steve Chaykosky, Dresser-Rand/Siemens</i>	Instrumentation & Controls Troubleshooting Part 1 <i>Raymond Carr, FW Murphy Production Controls</i>
9:40 - 11:10	9:40 - 11:10	9:40 - 11:10
	Compressor Valve Short Course Part II <i>Stephen Woodstock, Hoerbiger, Steve Chaykosky, Dresser-Rand/Siemens</i>	Instrumentation & Controls Troubleshooting Part 2 <i>Raymond Carr, FW Murphy Production Controls</i>

ENVIRONMENTAL HEALTH AND SAFETY	INTEGRAL GAS ENGINE MAINTENANCE	GAS PROCESSING
Room 327	Room 328	Room 329
Tuesday	Tuesday	Tuesday
1:00 - 2:30	1:00 - 2:30	1:00 - 2:30
Hazards with Storage Tanks / Safe Solutions in Operations <i>Alec Sunderlin, ECI</i>	Gas Engine Principles; Basics of Combustion; Basic Exhaust Emissions <i>Bob Webber, Dresser-Rand Company</i>	Flares / Thermal Oxidizers <i>Mike Riddell, Flare Services</i>
2:40 - 4:10	2:40 - 4:10	2:40 - 4:10
Air Permitting–Compressor Stations/Well Pads Using Avail. Gen'l Permits in PA, OH, WV <i>Patty Centofanti, Trinity Consultants</i>	Turbo, Blowers, Scavenging/Emissions Technology <i>Mitch Opat, Archrock; Greg Adams, Nick Brumbaugh, GE Oil & Gas</i>	Unmanned Arial Site Inspections & Data Platforms <i>Dave McPhillips, Avitas - GE</i>
Wednesday	Wednesday	Wednesday
8:00 - 9:30	8:00 - 9:30	8:00 - 9:30
	Journal Bearings <i>Greg Bone, MIBA Bearing Group</i>	*ROUNDTABLE* <i>Terry Nelson, WPI; Mike Riddell, Flare Services; David McPhillips, Avitas - GE</i>
9:40 - 11:10	9:40 - 11:10	9:40 - 11:10
Hazards with Storage Tanks / Safe Solutions in Operations <i>Alec Sunderlin, ECI</i>	Preventative/Predictive Maintenance <i>Keith Schafer, TC Energy</i>	Gas Dehydration - Part 1 <i>Terry Nelson, Tony Brown, Waukesha-Pearce</i>
1:00 - 2:30	1:00 - 2:30	1:00 - 2:30
What to Expect When You're Inspected <i>Patty Centofanti, Trinity Consultants</i>	Gas Valves & Engine Balancing <i>Keith Schafer, TC Energy</i>	Gas Dehydration - Part II <i>Terry Nelson, Tony Brown, Waukesha-Pearce (WPI)</i>
2:40 - 4:10	2:40 - 4:10	2:40 - 4:10
Gas Turbine Regulatory & Fugitive Gas Emissions <i>Anthony Pocengal, Solar Turbines Ryan McKennon, Solar Turbines</i>	Foundations & Grout <i>Richard O'Malley, Five Star Products</i>	Improving Perf. of Glycol Dehydration Systems w/Formulated Solvents <i>Nicholas Shurgott, Dow and Bryan Kuehne, Dow</i>
Thursday	Thursday	Thursday
8:00 - 9:30	8:00 - 9:30	8:00 - 9:30
	Major Components: Eval. and Maint. *ROUNDTABLE* <i>Bob Webber, Dresser-Rand; Mitch Opat, Archrock; Greg Adams, Nick Brumbaugh, GE Oil & Gas</i>	In-Line Gas Heating Technology Over the Years <i>Jim Hansen, Tecvalco USA; John Gorham, Mulcare Pipeline Solutions</i>
9:40 - 11:10	9:40 - 11:10	9:40 - 11:10

GENERAL INTEREST I	GENERAL INTEREST II	GENERAL INTEREST III
Room 331	Room 333	Room 334
Tuesday	Tuesday	Tuesday
1:00 - 2:30	1:00 - 2:30	1:00 - 2:30
COMPRESSOR ALIGNMENT: Shaft and Flatness in Compliance with Ariel ER-82 Specification <i>Chris Greene, LUDECA Inc.</i>	Solving Screw Compressor Package Vibrations <i>Steven Crocker, Wood</i>	Performance Control Devices Short Course, Part I <i>Tyler Clark, ACI Services; Dwayne Hickman, ACI Services</i>
2:40 - 4:10	2:40 - 4:10	2:40 - 4:10
Hose Essentials <i>Mike Gagel & Gary Osman, Swagelok</i>	Pipe Supports for Vibration and Thermal Growth Service <i>Starr Dalton, Wood</i>	Performance Control Devices Short Course, Part II <i>Tyler Clark, ACI Services Dwayne Hickman, ACI Services</i>
Wednesday	Wednesday	Wednesday
8:00 - 9:30	8:00 - 9:30	8:00 - 9:30
Compr. Station Noise Analysis & Proactive Noise Control <i>Lindsey Apland, Noise Solutions</i>	Using Business Intelligence Tools to Drive Asset Performance <i>Matt Brandon, Wood</i>	Zero Emission Blowdown <i>Doug Sahn, TPE Midstream</i>
9:40 - 11:10	9:40 - 11:10	9:40 - 11:10
Troubleshooting Screw Compressors <i>Lee Levisay, The PROS Co.</i>	Plunger Pump Basics, Common Issues and Measurement Techniques <i>Steven Crocker, Wood</i>	Empirical HP Curves <i>Bob Webber, Siemens</i>
1:00 - 2:30	1:00 - 2:30	1:00 - 2:30
Proper Tensioning and Torqueing <i>Fred Funk and Brian Gruber, Bolt Tech Mannings</i>	Trends in Noise Management & Reducing Acoustic Insulation <i>Farhana Lamis, Wood</i>	Predictive Maintenance Programs "How to justify them from a business perspective" <i>Bob Webber, Siemens</i>
2:40 - 4:10	2:40 - 4:10	2:40 - 4:10
Reciprocating Compressor Performance Software <i>Joe Wilson, ACI Services and Dwayne Hickman, ACI Services</i>	Resolving Vibration Issues on Reciprocating Compressors <i>Steven Crocker, Wood</i>	
Thursday	Thursday	Thursday
8:00 - 9:30	8:00 - 9:30	8:00 - 9:30
Tube Bending Efficiency Improvement, Part I <i>Mike Gagel, Swagelok</i>		
9:40 - 11:10	9:40 - 11:10	9:40 - 11:10
Tube Bending Efficiency Improvement, Part II <i>Mike Gagel, Swagelok</i>		

LUBRICATION & FILTRATION	PIPELINE VALVE & ACTUATION MAINTENANCE	TECHNICAL AND ENGINEERING
Room 335	Room 336	Room 338
Tuesday	Tuesday	Tuesday
1:00 - 2:30	1:00 - 2:30	1:00 - 2:30
Engine Oil Lubrication Challenges and Performance Factors for Cost Optimization <i>Cesar Lizcano, Shell Oil Products US</i>	Ball Valve Basics <i>Tim Northrup, Walt Elmquist, Jr; Northrup Equipment</i>	Electrical Hazardous Area Classification <i>George Samo and Andrew Manski, Equitrans</i>
2:40 - 4:10	2:40 - 4:10	2:40 - 4:10
Force Feed Lubrication Systems for Engines and Compressors *ROUNDTABLE* <i>Matt McCarthy, Sloan Lubrication</i>	Plug Valve Basics <i>Chad Nienser, CSN Solutions</i>	Compressor Station Control System Design <i>Ryan Fitzgerald, Basic Systems, Inc.</i>
Wednesday	Wednesday	Wednesday
8:00 - 9:30	8:00 - 9:30	8:00 - 9:30
Force Feed Lubrication Systems: HO Maint/Troubleshooting - Part 1 <i>Bill Pullin, Reynolds French</i>	Ball Valve Maint/Field Practical Troubleshooting *ROUNDTABLE* <i>Chad Nienser, CSN Solutions; Tim Northrup and Walt Elmquist Jr, Northrup Equipment</i>	Compressor Station Design Process Part 1 <i>Mitch Mazaher, PE, Basic Systems, Inc.</i>
9:40 - 11:10	9:40 - 11:10	9:40 - 11:10
Force Feed Lubrication Systems: HO Maint/Troubleshooting - Part 2 <i>Bill Pullin, Reynolds French</i>	Valve Maintenance Injection Equipment Fittings and Adapters <i>Ward Hruza; Sealweld USA</i>	Compressor Station Design Process Part 2 <i>Mitch Mazaher, PE, Basic Systems, Inc.</i>
1:00 - 2:30	1:00 - 2:30	1:00 - 2:30
Force Feed Lubrication Systems for Engines and Compressors *ROUNDTABLE* <i>Matt McCarthy, Sloan Lubrication</i>	Rotary Vane Actuators <i>Dale Opperman, Emerson-Shafer</i>	Cost Reduction and Reliability Improvements for Reciprocating Compressors in Shale Gas <i>Randy Dal Molin, Hoerbiger Compressor Technology</i>
2:40 - 4:10	2:40 - 4:10	2:40 - 4:10
Engine, Compressor Oil Filtration - Microns *ROUNDTABLE* <i>John Hopkins - John Hopkins Unlimited</i>	Scotch Yoke Actuators <i>David Garner, MRC Global</i>	Identifying the Optimal Comp. Station Location to Minimize Investment <i>Howard Murphy, EarthRes</i>
Thursday	Thursday	Thursday
8:00 - 9:30	8:00 - 9:30	8:00 - 9:30
	Actuator Maintenance and Troubleshooting <i>David Garner, Curtis Gill, MRC Global Rich Askin, CIRCOR</i>	Engineering Efficiency Into Your Compression Facility <i>Howard Murphy, EarthRes</i>
9:40 - 11:10	9:40 - 11:10	9:40 - 11:10
	Valve Commissioning *ROUNDTABLE* <i>Tim Northrup, Richie Riggelman; Northrup Equipment; Ward Hruza, Sealweld USA; Chad Nienser, CSN Solutions</i>	PSV Remediation Case Study: Refined Stress vs Physical Remediation <i>Tom Meikle, Borton-Lawson</i>

**ENTRY LEVEL COMPRESSOR
STATION OPERATOR TRAINING -
\$350**

OEM SOLAR TURBINES

OEM BHGE HSR

Room 309	Room 307	Room 310
Tuesday	Tuesday	Tuesday
1:00 - 2:30	1:00 - 2:30	1:00 - 2:30
Compressor Stations and Their Functions <i>Jay Jackson; Steve Hower, Equitrans</i>	OEM Solar Turbines #1 <i>Edouard Bahous and Edward Fichtner, Solar Turbines</i>	Ajax Introduction - Product Overview <i>Joseph Mares, Baker Hughes a GE Company</i>
2:40 - 4:10	2:40 - 4:10	2:40 - 4:10
Compressor Station Equipment and Yard Piping <i>Jay Jackson; Steve Hower, Equitrans</i>	OEM Solar Turbines #2 <i>Edouard Bahous/Edward Fichtner, Solar Turbines</i>	Ajax - Sequence Two Cycle Power Cylinder/Intake/Exhaust
Wednesday	Wednesday	Wednesday
8:00 - 9:30	8:00 - 9:30	8:00 - 9:30
Auxiliary Systems and Equipment <i>Jay Jackson; Steve Hower, Equitrans</i>	OEM Solar Turbines #3 <i>Edouard Bahous and Edward Fichtner, Solar Turbines</i>	Product Overview Models/Frames <i>Joseph Mares, Baker Hughes a GE Company</i>
9:40 - 11:10	9:40 - 11:10	9:40 - 11:10
Operating Characteristics of Reciprocating and Centrifugal Compressors <i>Jay Jackson; Steve Hower, Equitrans</i>	OEM Solar Turbines #4 <i>Edouard Bahous and Edward Fichtner, Solar Turbines</i>	Gas Compression Fundamentals <i>Joseph Mares, Baker Hughes a GE Company</i>
1:00 - 2:30	1:00 - 2:30	1:00 - 2:30
Design Characteristics of Prime Movers <i>Jay Jackson; Steve Hower, Equitrans</i>	OEM Solar Turbines #5 <i>Edouard Bahous and Edward Fichtner, Solar Turbines</i>	Lubrication Requirements <i>Joseph Mares, Baker Hughes a GE Company</i>
2:40 - 4:10	2:40 - 4:10	2:40 - 4:10
Factors Basic to Reciprocating Compressor Operation <i>Jay Jackson; Steve Hower, Equitrans</i>	OEM Solar Turbines #6 <i>Edouard Bahous and Edward Fichtner, Solar Turbines</i>	General Maintenance <i>Joseph Mares, Baker Hughes a GE Company</i>
Thursday	Thursday	Thursday
8:00 - 9:30	8:00 - 9:30	8:00 - 9:30
Characteristics of the Primary Equipment in a Compressor Station <i>Jay Jackson; Steve Hower, Equitrans</i>	OEM Solar Turbines #7 <i>Edouard Bahous and Edward Fichtner, Solar Turbines</i>	Trouble Shooting <i>Joseph Mares, Baker Hughes a GE Company</i>
9:40 - 11:10	9:40 - 11:10	9:40 - 11:10
Reciprocating Compressor Components & Cylinder Operation <i>Jay Jackson; Steve Hower, Equitrans</i>	OEM Solar Turbines #8 <i>Edouard Bahous and Edward Fichtner, Solar Turbines</i>	Commissioning & Start up/Evals <i>Joseph Mares, Baker Hughes a GE Company</i>

OEM CAT		OEM WAUKESHA ENGINE	
Room 311		Room 323	
Tuesday		Tuesday	
1:00 - 2:30		1:00 - 2:30	
CAT Engine Electronics Troubleshooting <i>Matt Curry</i>		ESM1/ESM2 Fundamentals & Troubleshooting <i>Tony Mente</i>	
2:40 - 4:10		2:40 - 4:10	
G3600 / G3500 Gas Compression *ROUNDTABLE* "Ask the Expert" <i>Scott Double; Matt Curry; Aaron Snyder</i>		Improving Legacy Waukesha Engine Issues in Appalachia <i>Ryan Rudnitzki</i>	
Wednesday		Wednesday	
8:00 - 9:30		8:00 - 9:30	
CAT G3600 A4 Operator Control Panel <i>Aaron Snyder</i>		VHP *ROUNDTABLE* Open Discussion <i>Waukesha Sales Team</i>	
9:40 - 11:10		9:40 - 11:10	
CAT Engine Electronics Troubleshooting <i>Matt Curry</i>		Installation, Startup & Commissioning <i>Tony Mente</i>	
1:00 - 2:30		1:00 - 2:30	
CAT Electronic Technician (ET) <i>Aaron Snyder</i>		Product Update & Series 5 Introduction <i>Ryan Rudnitzki</i>	
2:40 - 4:10		2:40 - 4:10	
G3600 / G3500 Gas Compression *ROUNDTABLE* "Ask the Expert" <i>Scott Double; Matt Curry; Aaron Snyder</i>		CM&U Offerings and Installation <i>Chris Kipp</i>	
Thursday		Thursday	
8:00 - 9:30		8:00 - 9:30	
CAT Engine Installation / Cooling Systems / GERP <i>Scott Double</i>		Series 2/Series 4 to Series 5 Upgrade Deep Dive <i>Chris Kipp</i>	
9:40 - 11:10		9:40 - 11:10	
Cat G-3600A 4 Product Health and Engine Tuning <i>Matt Curry - Scott Double</i>		Product Overview <i>Tony Mente</i>	