

1-Day Live Online Hydraulic Troubleshooting

LIVE ONLINE SEMINAR

Courses Available
Throughout the Year

WWW.NFPITRAINING.COM

COST: \$625.00
INCLUDES:
Class Manual
Certificate of Completion



1. **Fundamentals of Hydraulics**
 - Flow
 - Pressure
 - Torque
 - Horsepower
 - Speed
2. **Reading Schematics & Graphic Symbols**
3. **Understanding System Operation**
 - System Efficiency
 - Advantages & Disadvantages
 - Braking Systems
 - Open Loop & Closed Loop
 - Load-Sense
 - Steering Systems
4. **Recognizing the Need for Cleanliness & Filtration**
 - Viscosity Effects
 - Micron Ratings
 - Effects of Contamination
5. **Understanding Flow in the System**
 - Slow Or Erratic Actuator Operation
 - Component Wear – Effects Of Contamination, Pressure & Heat
 - Case Drain Monitoring
6. **Diagnosing Plumbing Problems**
 - Fittings (NPTF, SAE, JIC 37°, Straight Thread O-Ring)
 - Hose, Tubing & Pipe Sizing
 - Pressure Ratings
7. **Cavitation & Aeration Problems**
 - Inlet Restrictions
 - Sizing Filters and Strainers
 - Atmospheric Pressure
 - Pump & Motor Shaft Speeds
8. **Troubleshooting Components**
 - Pumps & Pump Controls
 - Motors
 - Cylinders
 - Valves
 - Pressure Controls
 - Steering Systems
 - Braking Systems
9. **Pressure Control Adjustments**
 - Relief Valves
 - Sequence Valves
 - Pilot Operated Valves
 - Counterbalance Valves
 - Unloading Valves
 - Pressure Reducing Valves
 - Brake Valves
10. **Speed Control Adjustments**
 - Meter-In
 - Bleed-Off
 - Meter-Out
 - Variable Displacement
 - Variable Speed
 - Pressure Compensated
11. **Heat Removal from Hydraulic Systems**
12. **Start-Up Procedures**
13. **Hydraulic System Safety**

REGISTRATION FORM

PERSON TO CONTACT FOR CONFIRMATION: _____			
STUDENTS: _____			
COMPANY: _____		PHONE: _____	EXT: _____
ADDRESS: _____		EMAIL: _____	
CITY: _____	STATE: _____	ZIP: _____	
STUDENT(S) (____) @ \$625 PER PERSON \$ _____			
<input type="checkbox"/> CHECK IS ENCLOSED <input type="checkbox"/> USE OUR PURCHASE ORDER NO. _____			
<input type="checkbox"/> VISA <input type="checkbox"/> M/C <input type="checkbox"/> AE # _____ EXP: _____			
ENROLLMENT ARRANGEMENTS SHOULD BE RECEIVED A MINIMUM OF SEVEN DAYS PRIOR TO THE SEMINAR DATE			

For more information or to register contact us: 800-704-1066 or email info@nfpitraining.com