



***Revised* 2022 PRV Training Schedule**



503 Woodlawn Street, Belmont, NC 28012



JAC Consulting, Inc. will present our Three (3) day, Hands-On, Pressure Relief Valve Repair Maintenance Training Seminars with an additional One (1) day Pilot Operated Relief Valve (PORV) Seminar on the following dates in 2022 at our 503 Woodlawn Street Training Facility in Belmont, NC:

Seminar Date:

June 14-17, 2022

August 16-19, 2022

September 13-16, 2022

October 18-21, 2022

Hours 8:00 AM – 4:30 PM

Class Limited to 8 Students

Seminar Description/Fees:

Hands-On PRV Repair & Testing

- Direct Spring Operated PRV

Tuition \$1,200.00 per Person

- Pilot Operated Relief Valve

Tuition \$400.00 per Person

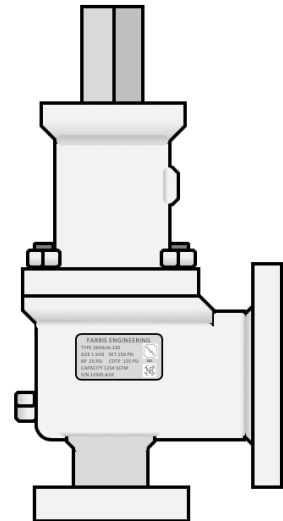
- *Special Pricing for all 4 Days*

Combined \$1,500.00 per Person

This course is 70% Hands-On

The Scope of Hands-On Training shall include the following:

- Classroom Activities
- Codes & Standards Comparison
- PRV Nomenclature & Terminology
- Principles of PRV Operation
- PRV Repair Activities (Hands On)
- Disassembly & Critical Inspection
- Lapping & Reassembly
- Air & Liquid Testing
- Sealing & Repair Nameplate Stamping
- PRV Troubleshooting
- PRV Repair Documentation
- ***Optional Class: Pilot Operated Relief Valve Seminar***



2022 Training Registration Form

The class is presented in Belmont, NC, at our NEW Training Facility located west of Charlotte, NC, near Belmont Abbey College off Exit 26 on I-85 South. There are Hotels nearby (see map and hotel contact information on page 3).

The Classes will run Tuesday through Friday.

Registrations should be received 30 days prior to the start of class.

TUITION

Three Day Seminar: \$1,200 per person

Pilot Operated Class: \$ 400 per person

Special Price for all four (4) days is only **\$ 1,500**. Save **\$ 100** per person.

Tuition covers all directly related seminar expenses including handouts. However, travel, lodging and meal expenses are the responsibility of each registrant and are not included in tuition.

PAYMENT

- Credit Card or Company check made payable to JAC Consulting, Inc.
 - Company billing - please mail, fax, phone, or email a purchase order
- All payment information must be received by JAC Consulting, Inc. in advance.

CONFIRMATION

Please be sure to have confirmation of your enrollment before making travel arrangements. If you have not received a confirmation letter prior to the start of the seminar, please call or email JAC Consulting, Inc. to confirm your enrollment.

CANCELLATION

Cancellation notice must be received 30 days prior to start of seminar to ensure a full refund. Cancellations received after this date will be subject to a \$400 service charge. Substitution of attendees may be made at any time. JAC Consulting, Inc. reserves the right to cancel the seminar if there are not enough students to justify holding the class. We need to have a minimum of four (4) participants. JAC Consulting, Inc. reserves the right to cancel seminars at its discretion.

TAX DEDUCTIONS

U.S. Treasury Regulation 1.625 permits an income tax deduction for educational expenses (including registration fees, travel, meals, and lodging) undertaken to maintain and improve professional skills. Please determine how the regulation fits your situation.

NOTICES

Recording devices are strictly prohibited.

The JAC Consulting, Inc. Training Facility is a nonsmoking facility.

We have had attendees in this PRV Repair Seminar from industries including, Pharmaceutical, Oil & Gas, Petrochemical, Nuclear & Fossil Power Stations and National Board Certified "VR" Shops in more than twenty States, Puerto-Rico, Canada, Dominican Republic, Indonesia & Bangladesh.

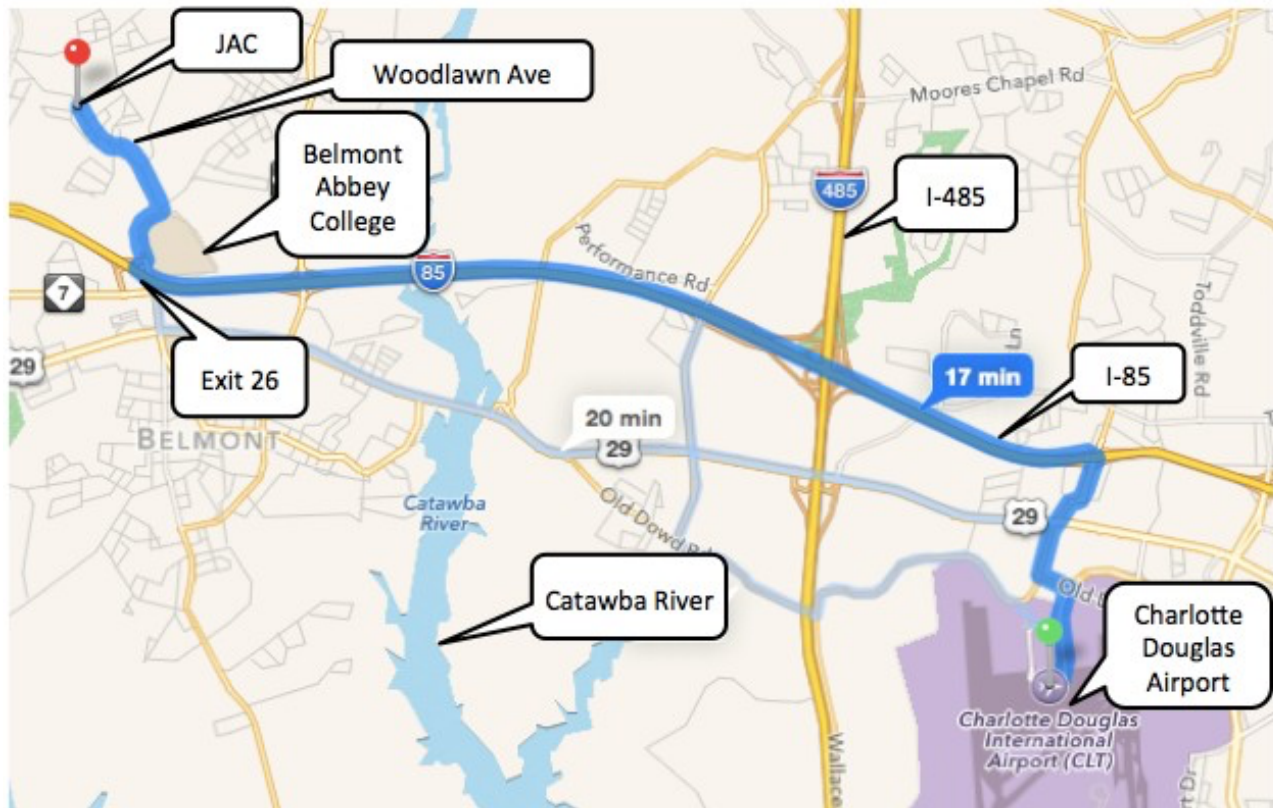
CLASS HOURS

Class hours are 8:00 AM until 4:30 PM. The schedule calls for fifty (50) minutes of instruction time and ten (10) minute breaks every hour.

Please complete and return the following registration form in order to secure you spot(s) in the class. Thank you for your interest in our Training Programs.

MAP TO JAC CONSULTING, INC. TRAINING FACILITY

Located at 503 Woodlawn Street, Belmont, NC 28012



The four (4) hotels nearest the Training Facility are located at Exits 26 & 27, approximately 1.5 to 2.5 miles from JAC Consulting, Inc.

| | |
|---|---|
| Holiday Inn Express (Exit 27 on I-85) 250 Beatty Drive Belmont, NC 28012 (704) 812-2000 | Fairfield Inn & Suites Charlotte Belmont (Exit 27 on I-85) 1 Caldwell Drive Belmont, North Carolina 28012 704-317-2777 |
| Hampton Inn (Exit 26 on I-85) 820 Cecilia Alexander Dr. Belmont, NC 28012 (704) 825-6100 | Home2 Suites by Hilton (Exit 27 on I-85) 871 Hawley Ave Belmont, NC 28012 (704)755-1770 |

Please contact us for more information.

Best Regards,

J. Alton Cox
JAC Consulting, Inc.



TRAINING SEMINAR REGISTRATION FORM

Pressure Relief Valve Training: Hands-On Inspection, Repair & Testing Pilot Operated Relief Valve Training: Hands-On Repair & Testing

| | | |
|---|---|---|
| Check Date of Preferred Course: | PRV Class Date: June 14-16, 2022 <input type="checkbox"/> August 16-18, 2022 <input type="checkbox"/> September 13-15, 2022 <input type="checkbox"/> <i>October 18-20, 2022.</i> <input type="checkbox"/> | PORV Class Date: June 17, 2022 <input type="checkbox"/> August 19, 2022 <input type="checkbox"/> September 16, 2022 <input type="checkbox"/> <i>October 21, 2022</i> <input type="checkbox"/> |
| Name of Attendee: | | |
| Name of Attendee: | | |
| Name of Attendee: | | |
| Name of Attendee: | | |
| Name of Attendee: | | |

Company Name: _____

Company Address: _____

City: _____ State: _____ ZIP: _____

Telephone: _____ FAX: _____

Email: _____

PAYMENT INFORMATION: FEE \$ 1,200.00 per person for three (3) day PRV Class
 FEE \$ 400.00 per person for one (1) day PORV Class
FEE \$ 1,500.00 Special for Both Classes, four (4) days

Purchase Order No.: _____

Check No. (Enclosed): _____

 Credit Card: ☐ VISA ☐ MasterCard ☐ American Express

Card Info: For your protection, please call with your Credit Card Number to minimize paper copies or electronic records of your sensitive information. Thank you.

Email or Fax completed form to: alton@jaltoncox.com or Fax 704.820.8408

Call with questions: 704.301.8532

| | |
|--|-------|
| JAC CONSULTING, INC. INTERNAL USE ONLY. PLEASE DO NOT WRITE BELOW THIS LINE. | |
| CAPTURED: | DATE: |
| REFERENCE: | BY: |



**TRAINING FACILITY
503 WOODLAWN STREET
BELMONT, NC 28012**

PRV MAINTENANCE SEMINAR SCHEDULE

| DAY | TIME | LESSON TITLE | BREAKS |
|--------------|-------------|--|--------------------|
| One | 3 Hr | INTRODUCTION to HANDS-ON PRV REPAIR | Breaks on the hour |
| | 1 Hr | NAMEPLATE DATA INTERPRETATION [SRV]* | Lunch |
| | 1 Hr | DISASSEMBLY [SRV]* | Breaks on the hour |
| | 3 Hr | CRITICAL INSPECTION [SRV]* | Day 1 Completed |
| Two | 1 Hr | CRITICAL INSPECTION [SRV]* (Continued) | Breaks on the hour |
| | 2 Hr | LAPPING [SRV]* | Break |
| | 1 Hr | ASSEMBLY [SRV]* | Lunch |
| | 1 Hr | DISASSEMBLY [SV]* (Continued) | Break |
| | 1 Hr | CRITICAL INSPECTION [SV]* (Continued) | Break |
| | 1 Hr | LAPPING [SV]* (Continued) | Break |
| | 1 Hr | ASSEMBLY [SV]* (Continued) | Day 2 Completed |
| | | | |
| Three | 4 Hr | AIR & LIQUID TESTING* | Breaks on the hour |
| | 2 Hr | SEALING & NAMEPLATE STAMPING* | Break |
| | 1 Hr | TROUBLESHOOTING | Break |
| | 1 Hr | PRV PRESENTATION SUMMARY & REVIEW | Class Completed |
| | | | |
| | | SPECIAL ADDITIONAL PILOT OPERATED SEMINAR | |
| Four | 1 Hr | INTRODUCTION TO PILOT OPERATED RELIEF VALVES | Breaks on the hour |
| | 1 Hr | MAIN VALVE DISASSEMBLY & INSPECTION* | Break |
| | 1 Hr | MAIN VALVE REASSEMBLY* | Break |
| | 1 Hr | SNAP ACTING PILOT DISASSEMBLY & INSPECTION* | Lunch |
| | 1 Hr | SNAP ACTING PILOT REASSEMBLY & TESTING* | Break |
| | 1 Hr | MODULATING PILOT DISASSEMBLY & INSPECTION* | Break |
| | 1 Hr | MODULATING PILOT REASSEMBLY & TESTING* | Class Completed |

* SHOP / HANDS-ON

**JAC CONSULTING, INC. TRAINING DEPARTMENT
PRESSURE RELIEF VALVE MAINTENANCE
TRAINING COURSE SYLLABUS**

This three (3) day seminar combines hands-on experience and classroom instruction in order to review Pressure Relief Valve (PRV) diagnostics and trouble shooting. This Performance Based Training Course using the Systematic Approach was developed by JAC Consulting, Inc. with the intention of improving the Knowledge, Skill, Attitude, and Ability of Maintenance Personnel involved in PRV Repair and Testing.

There are nine (9) sessions in this Seminar. Each session has specific Terminal Performance Objectives (TPO). One or more Enabling Objectives for each TPO are included as well. The TPOs are listed in this Syllabus. The instructor will draw upon his personal knowledge and experience to enhance the Student Handout Materials presented with this Seminar.

An Achievement Record is provided to document verification of the individual tasks each student performs. Written Examinations are used to provide for periodic review and evaluation. Performance Evaluation is the entire basis of each student's grade (Satisfactory/Unsatisfactory).

The TPOs for this seminar are as follows:

- * Provided with a PRV Cutaway, identify all major components and their respective functions in accordance with manufacturer's nomenclature and accepted industry terminology.
- * Presented with a PRV nameplate, and Manufacturer's Catalog, transcribe and interpret data to determine proper application in accordance with manufacturer's recommendations and applicable ASME Code requirements.
- * Provided with a PRV, hand tools, and test equipment, perform, and document, preliminary test with no errors.
- * Given a PRV and hand tools, disassemble the PRV to component level and record the "as found" condition following the manufacturer's maintenance procedure.
- * Presented with PRV components, diagnose problems in accordance with accepted troubleshooting techniques with 100% accuracy.
- * Given PRV Nameplate Data, select Inspection Criteria and inspection tools to determine the acceptability of Critical PRV Parts.
- * Using Inspection Criteria and inspection tools, determine the acceptability of Critical PRV Parts in accordance with inspection criteria.
- * Provided with laps, compounds, and a PRV seat (Disc/Nozzle), obtain the required finish.
- * Given a PRV and hand tools, assemble a PRV and preset the adjustments to manufacturer's recommendations.
- * Presented with a PRV, hand tools, and test equipment, test and adjust a PRV to the applicable ASME Code specifications.
- * Given hand tools, sealing pliers, wire & lead seals, lock and seal all external adjustments of a PRV in accordance with ASME Code requirements.
- * Given a QC Traveler, document all steps of repair as required.

2022 Training Registration Form

(PRV Training Course Continued)

The instructor will document the performance of the following TASKS by each student:

- * Read and discuss the Glossary provided
- * Participate in a discussion of ASME Code requirements
- * Participate in a discussion of PRV Nomenclature
- * Identify all components of typical Safety and Safety-Relief from PRV cutaways
- * Participate in a discussion of PRV Applications & Installations
- * Participate in a discussion of PRV Operating Principles
- * Participate in a discussion of PRV nameplate data interpretation
- * Disassemble a PRV, record and evaluate "as found" condition
- * Participate in a discussion of troubleshooting techniques
- * Select and use dimensional instruments correctly
- * Demonstrate the ability to read prints and apply tolerances
- * Inspect all points of a PRV in accordance with a procedure
- * Participate in a discussion on machining PRV parts
- * Lap PRV seating surfaces and grind PRV bearing points
- * Assemble a PRV in accordance with a procedure
- * Adjust the Set Pressure of a PRV
- * Lock & Seal all external adjustments on a PRV
- * Participate in a discussion on Documentation & Traceability
- * Participate in a discussion on PRV Repair Support Functions

2022 Training Registration Form

J. Alton Cox, PRV Consultant

EMPLOYMENT HISTORY

09/17 to Present **JAC TEST EQUIPMENT, INC., Belmont, NC**
Responsible for Design & Fabrication of Pressure Relief Valve Test Equipment (PRV).

09/08 to Present **JAC CONSULTING, INC., Belmont, NC**
Responsible for Development and Presentation of PRV Maintenance Training for Nuclear, Petrochemical, Refineries & Pharmaceutical Industries. QC Consulting for NBBI VR & T/O and ASME V & UV Assemblers & Manufacturers.

02/06 to 08/08 **INDUSTRIAL VALVE SALES and SERVICE, INC., Mobile, AL**
Responsible for QC for 3 VR locations & an ASME V & UV Assembler location. Responsible for Development & Presentation of PRV Repair Training for NASA, Nuclear, Chemical, Refineries & Pharmaceutical Clients & VR and V & UV Consulting Services.

11/96 to 01/06 **DeLUCA TEST EQUIPMENT, INC., Charlotte, NC**
Responsible for Design, Fabrication and Installation of Steam, Air and Liquid Service PRV Test Equipment. Development and Presentation of PRV Repair Training for Nuclear, Petrochemical, Refineries & Pharmaceutical Industries. Consulting for NBBI VR and ASME V & UV Assemblers.

01/88 to 10/96 **LEE VALVE COMPANY, Charlotte, NC**
Responsible for QC, Technical Support for Sales, In-House and Customer Training, Supervision of Shop and Field Repairs, and Maintenance of both NBBI VR and ASME V & UV Assembler Programs.

09/78 to 12/87 **DeLUCA VALVE & INSTRUMENT, Charlotte, NC**
Responsible for Quality Control, Training, Supervision of Shop and Field Repairs, and Maintenance of NBBI VR and ASME V & UV Assembler Programs.

12/76 to 08/78 **DRESSER INDUSTRIAL VALVE DIV., Alexandria, LA**
Responsible for Hands-on Repair and Supervision of Field Repairs for Dresser PRVs in Fossil & Nuclear Utilities, Pulp & Paper Industry, and Oil Refineries.

02/73 to 11/76 **INDUSTRIAL VALVE & GAUGE, Charlotte, NC**
Responsible for Assembly of New PRVs and Repair of Used PRVs.

PRV TRAINING CLASSES ATTENDED

09/06 TYCO – Anderson Greenwood Crosby Pressure Relief Valve Training Class

08/01 Crosby Nuclear Pressure Relief Valve Training Class

08/92 Keye Productivity Center - “How to Be a Better Trainer” Seminar

10/90 Kunkle - Pressure Relief Valve Training Class

02/87 Dresser - ASME Sec. I & VIII – Shop & Field Repair “Green Tag” PRV Seminar

10/86 Farris - Pressure Relief Valve Training Class

09/86 National Board of Boiler and Pressure Vessel Inspectors - “VR” Seminar

08/86 Crosby - Pressure Relief Valve Training Class

10/84 Dresser - ASME Section I - Field Repair “Green Tag” PRV Seminar

08/84 Dresser - ASME Section VIII - Shop Repair “Green Tag” PRV Seminar

08/75 Dresser - ASME “V” & “UV” - Assembler Training Class

INDUSTRY RELATED ACTIVITIES

07/10 to 08/14 Chairman of ASME PTC-25, Pressure Relief Devices

01/07 to 01/22 Vice Chairman of NBIC Sub-Committee Pressure Relief Devices

01/07 to Present Member of NBIC Sub-Committee Pressure Relief Devices

02/05 to 07/10 Vice Chairman of ASME PTC-25, Pressure Relief Devices

11/02 to 08/14 Chairman of ASME SC-SVR, Sub-Group Testing

01/00 to 07/06 Member of NBIC Sub-Committee on Overpressure Protection

01/99 to 10/17 Member of ASME PTC-25, Pressure Relief Devices

06/91 to 10/17 Member of ASME Sub-Committee on Safety Valve Requirements

06/91 to 10/17 Member of ASME SC-SVR, Sub-Group Testing

02/90 to 01/97 Member of NBBI Committee on Repair of Pressure Relief Valves, “VR” Committee

01/87 to 07/15 Instructor for National Board “VR” Training Class