

# 2023 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 2023 at our 503 Woodlawn Street Training Facility in Belmont, NC:

## **Seminar Date:**

June 13-16, 2023 July 11-14, 2023 August 15-18, 2023 September 12-15, 2023 October 17-20, 2023

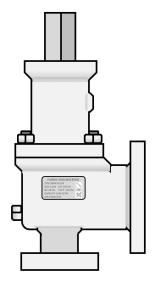
Hours 8:00 AM – 4:30 PM Class Limited to 8 Students Seminar Description/Fees Hands-On PRV Repair & Testing - Direct Spring Operated PRV Tuition \$1,200.00 per Person

- Pilot Operated Relief Valve Tuition \$400.00 per Person

- Special Pricing for all 4 Days Combined \$1,500.00 per Person This course is 75% 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



503 Woodlawn Street Belmont, NC 28012 Phone 704.301.8532 Fax 704.820.8408 2023 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.

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#### Located at 503 Woodlawn Street, Belmont, NC 28012 JAC Moores Chapel Rd Woodlawn Ave Belmont Abbey 1 - 485College eror ance Rd. 0 1-85 Exit 26 17 min 20 min BELMONT 29 Old D Catawba

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Charlotte Douglas International Airport (CLT)

Charlotte Douglas Airport

# MAP TO JAC CONSULTING, INC. TRAINING FACILITY

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.

Catawba River

River-

Holiday Inn Express (Exit 27 on I-85)	Fairfield Inn & Suites Charlotte Belmont (Exit 27 on I-85)
250 Beatty Drive	1 Caldwell Drive
Belmont, NC 28012	Belmont, North Carolina 28012
(704) 812-2000	704-317-2777
Hampton Inn (Exit 26 on I-85)	Home2 Suites by Hilton (Exit 27 on I-85)
820 Cecilia Alexander Dr.	871 Hawley Ave
Belmont, NC 28012	Belmont, NC 28012
(704) 825-6100	(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	PRV Class	Date:		PORV Class D	Date:
Preferred Course:	March 14-1	6, 2023		March 17, 202	3
N	June 13-15,	2023		June 16, 2023	
	July 13-15,	2023		July 14, 2023	
	August 15-1	17, 2023		August 18, 202	23
	September	12-14, 2023		September 15,	2023
	October 17-	-19, 2023		October 20, 20	23
Name of Attendee:					
Name of Attendee:					
Name of Attendee:					
Name of Attendee:					
Name of Attendee:					
Name of Attendee:					
Company Name:					
Company Address:					
City:					IP:
Telephone:			FAX:		
Email:					
PAYMENT INFORM	MATION:	FEE \$ 400.0	)0 per per	erson for three (3) son for one (1) day <b>ial for Both Class</b>	PORV Class
Purchase Order No.:	rchase Order No.: Che		Che	ck No	
	<b>v</b> 1	· 1	•		lumber to minimize rmation. Thank you.
Email completed form	to: <u>alton@jal</u>	toncox.com			
Call with questions: 70	04.301.8532				
JAC CONSULTING, INC		E ONLY. PLEAS	E DO NOT		
APPROVED:	ID:			DATE:	BY:



#### **PRV MAINTENANCE SEMINAR SCHEDULE**

DAY	TIME	LESSON TITLE	BREAKS
One	3 Hr	INTRODUCTION to HANDS-ON PRV REPAIR	Breaks on the hour
1	1 Hr	NAMEPLATE DATA INTERPRETATION [SRV]*	Lunch
	2 Hr	DISASSEMBLY [SRV]*	Breaks on the hour
	2 Hr	CRITICAL INSPECTION [SRV]*	Day 1 Completed
Two	1 Hr	CRITICAL INSPECTION [SRV]* (Continued)	Breaks on the hour
	1 Hr	LAPPING [SRV]*	Break
	1 Hr	ASSEMBLY [SRV]*	Lunch
	1 Hr	DISASSEMBLY [SV]* (Continued)	Break
	2 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 OPRATED 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.

#### 2023 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

2023 Training Registration Form

6 6	J. Alton Cox, PRV Instructor
<b>EMPLOYMENT HI</b>	STORY
09/17 to 12/2023	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	<b>INDUSTRIAL VALVE SALES and SERVICE, INC., Mobile, AL</b>
	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 & Installation of Steam, Air & Liquid Service PRV
	Test Equipment. Development & 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, In-House & Customer Training, Shop and Field
	Repair Supervision, & Maintenance of NB VR & ASME V/UV Assembler Programs.
09/78 to 12/87	DeLUCA VALVE & INSTRUMENT, Charlotte, NC
	Responsible for Quality Control, Training, Shop and Field Repair Supervision, and
	Maintenance of NB 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.
<b>PRV TRAINING CI</b>	LASSES 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
<b>INDUSTRY RELAT</b>	'ED 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
01/07 to Present	Member of NBIC Sub-Group 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