



WESTERN PROCESS CONTROLS TRAINING COURSES 2010

WESTERN PROCESS CONTROLS
are considered to be the leaders in the field of control valves

WESTERN PROCESS CONTROLS

- Provides control, automated and relief valves to many organisations within the metropolitan, country areas and offshore sites in Western Australia, and are considered to be leaders in this field.
- Service Department comprises a 1500m² workshop fully equipped for the repair and service of control valves, regulators, field instruments and associated process control equipment.
- Quality System is designed in accordance with Standard AS/NZS/ ISO9001; ISO/IEC 17025; our workshop has NATA laboratory and hydrotesting accreditation and is a Certified Fisher Repair Facility.
- Provides training for a pressure relief device designed to re-close and prevent further flow of fluid after normal operation conditions have been restored.
- Provides Fieldbus training which is ideal for technicians and engineers involved with the commissioning, operation or maintenance of Plants utilizing Foundation Fieldbus technology.
- Specialises in valve automation and Fieldvue solutions
- Is dedicated to providing its customers with quality products and services on time and to their requirements.
- Provides an in-depth look into maintenance, sizing and selection of pressure relief devices.

TRAINING COURSES FOR 2010

- Basic Valve and DVC Engineering Course
- FIELDVUE Technicians Introduction Course
- FIELDVUE Engineering Course
- Control Valve Engineering Course
- Control Valve Technical/Practical Course
- Control Valve Engineering II Course -
Advanced/Severe Service (By Arrangement)
- Relief Valve Engineering Course
- Relief Valve Maintenance Course
- Interfacing Foundation Fieldbus DVC with DeltaV
(By Arrangement)

**REGISTER
BY
PHONE, FAX OR EMAIL**

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OUR MISSION STATEMENT

To be a benchmark in excellence of process controls solutions

Western Process Controls
1 Harvard Way
Canning Vale WA 6155
(Post Office Box 1141, Canning Vale 6970)
Web: www.wpc.com.au





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BASIC VALVE AND DVC ENGINEERING COURSE

Overview

Participants will gain understanding of control valves and FieldVue DVC technology, where it can be applied within a process plant; installation; commissioning; perform diagnostics; how to utilise; and its benefits.

Pre-Requisite

Trade and/or engineering background

Learning Outcomes

At the conclusion of this course, participants will have knowledge of:

- Basic valve design; construction; selection; and operation
- Valve assembly awareness: bench set and adjustment
- DVC Positioner basics: construction; principle of operation and familiarisation of components
- DVC Installation, commissioning, using 375 field communicator
- DVC Installation using Valvelink set-up Wizard: via HART/Foundation FieldBus
- DVC valve performance diagnostics; detailed analysis of valve signatures, stroking: full and partial (SIS)
- DVC maintenance / fault finding process
- Tag management; data save and reporting / printing

Participant Numbers

It is recommended that a minimum of 4 participants attend up to a maximum of 6 participants.

WPC reserves the right to cancel/postpone any course in which the minimum number of participants has not been achieved.

Logistics

Training can also be conducted on site, however, training equipment will need to be mobilised and will add to the cost of the course.

Training Dates

24-25 February 2010
26-27 May 2010
25-26 August 2010
17-18 November 2010

Suggested Further Training

Control Valve Technical/Practical
Control Valve Engineering



DURATION	Two (2) days
COST	A\$1,800.00 per person exclusive of GST
NUMBERS	Minimum 4 / maximum 6 participants
VALIDITY	2 years
REFRESHER	One (1) day - A\$250.00 per person exclusive of GST



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CONTROL VALVE – ENGINEERING COURSE

Overview

Participants will gain knowledge regarding all aspects on control valves and related equipment ie: construction; operation. This course also involves comprehension of valve sizing exercises.

Pre-Requisite

Trade and/or engineering background

Learning Outcomes

At the conclusion of this course, participants should be able to:

- Understand what happens inside a control valve from basic fluid mechanics point of view
- Know about all the different types of control valves commonly in use and understand the relative advantages of each
- Have an understanding on how to select materials for bodies, trims, packing boxes and gaskets
- Choose between different valve characteristics on offer and comprehend seat leakage rates
- Appreciate the difference between cavitation and flashing and know what is choked flow
- Recognise severe service applications, have an appreciation for their associated problems and understand ways to overcome them
- Understand the failure modes for control valves and demonstrate new approaches to troubleshooting
- Make use of a computer sizing program to assist with the selection of control valves
- Valve I/P transducers/positioner function operation
- Pneumatic accessories that are available to allow the control valve to operate

Participant Numbers

It is recommended that a minimum of 4 participants attend up to a maximum of 8 participants.

WPC reserves the right to cancel/postpone any course in which the minimum number of participants has not been achieved.

Logistics

Training can also be conducted on site, however, training equipment will need to be mobilised and will add to the cost of the course.

Training Dates

10-11 March 2010
16-17 June 2010
22-23 September 2010
8-9 December 2010

Suggested Further Training

Relief Valve Engineering
FieldVue Engineering



DURATION	Two (2) days
COST	A\$1,800.00 per person exclusive of GST
NUMBERS	Minimum 4 / maximum 6 participants
VALIDITY	2 years
REFRESHER	One (1) day - A\$250.00 per person exclusive of GST

CONTROL VALVE – TECHNICAL/PRACTICAL COURSE

Overview

Participants will gain knowledge regarding all relevant aspects control valves and their construction, I/P transducers and positioners; their construction, operation and repair. This course also incorporates a practical “hands on” exercise.

Pre-Requisite

Trade certificate preferred.

Learning Outcomes

- At the conclusion of this course, participants should be able to or have knowledge of:
- Understand what happens inside a control valve from basic fluid mechanics point of view
 - Appreciate the difference between cavitation and flashing and know what is choked flow
 - Aware of all the different types of control valves commonly in use and their applications
 - Obtain a basic understanding on how to select materials for bodies, trims, packing boxes and gaskets
 - Understand the failure modes for control valves and demonstrate new approaches to troubleshooting. Awareness of diagnostic equipment
 - Control Valve assembly, including the process of lapping, seat leak and hydrostatic testing
 - Actuator Bench Set comprehension, adjustment and maintenance
 - Valve I/P transducers/positioner function, operation, calibration and maintenance
 - Pneumatic accessories that are available to allow the control valve to operate

Participant Numbers

It is recommended that a minimum of 4 participants attend up to a maximum of 6 participants

WPC reserves the right to cancel/postpone any course in which the minimum number of participants has not been achieved.

Logistics

Training can also be conducted on site, however, training equipment will need to be mobilised and will add to the cost of the course.

Training Dates

3-4 March 2010
9-10 June 2010
8-9 September 2010
1-2 December 2010

Suggested Further Training

Control Valve Engineering
Basic Control & DVC Engineering



DURATION	Two (2) day
COST	A\$1800.00 per person exclusive of GST
NUMBERS	Minimum 4 / maximum 6 participants
VALIDITY	2 years
REFRESHER	Half day - A\$250.00 per person exclusive of GST



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CONTROL VALVE ENGINEERING II (ADVANCED / SEVERE SERVICE)

Overview

This 4-1/2 day course is for practising engineers and senior technicians who are seeking advanced training in control valve selection and sizing; and severe service. This course proceeds from a review of basic sizing and selection concepts to advanced concepts used when selecting and sizing control valves for severe service and unusual applications. The course will also include lectures and numerous problem-solving sessions that make extensive use of FirstVue software and other sizing and selection tools.

Pre-Requisite

Participants should have completed the Control Valve Engineering I or have the equivalent experience (minimum of two years specifying control valves and instrumentation). Familiarity with FirstVue is highly recommended.

Course Topics

- Aerodynamic Noise
- Whisper Trim®
- IEC Noise Prediction
- WhisperFlo® Diffusers
- Cavitation Issues and Solutions
- Steam Conditioning Valves
- High Pressure/Temperature Issues
- Sizing for Two Phase Flow, Fluid Mixtures and Dissolved Gas
- Corrosive/Erosive Service
- Actuators: Stroking Speed, Hysteresis
- Other Control Application Guidelines

Learning Outcomes

- At the conclusion of this course, participants should be able to:
- Select and size control valves and diffusers to reduce aerodynamic noise
 - Select and size control valves for cavitating applications
 - Select and size steam conditioning valves
 - Select valve types and options for corrosive and erosive fluids
 - Size control valves for two-phase flow and hydrocarbon mixtures

Participant Numbers

A minimum of 10 participants required for this course. WPC reserves the right to cancel/postpone any course in which the minimum number of participants has not been achieved.

Training Dates

By arrangement.

Logistics

Training can also be conducted on site, however, training equipment will need to be mobilised and will add to the cost of the course.



DURATION	4-1/2 days
COST	A\$1450.00 per person exclusive of GST
NUMBERS	Minimum of 10 participants
VALIDITY	2 years



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RELIEF VALVE – ENGINEERING COURSE

Overview

Participants will gain knowledge of Function, Design, Sizing for different fluids and the required maintenance procedures for all types of relief valves.

Pre-Requisite

Trade and/or Engineering background.

Learning Outcomes

At the conclusion of this course, participants will have knowledge of:

- Relief valve basics and operation
- Relief valve performance issues
- Relief valve types and features
- Sizing for liquids, gases / vapours, using SizeMaster software incorporating exercises
- General maintenance and testing procedures

Participant Numbers

It is recommended that a minimum of 4 participants attend up to a maximum of 8 participants

WPC reserves the right to cancel/postpone any course in which the minimum number of participants has not been achieved.

Logistics

Training can also be conducted on site, however, training equipment will need to be mobilised and will add to the cost of the course.

Training Dates

18 February 2010
13 May 2010
12 August 2010
11 November 2010

Suggested Further Training

Control Valve Engineering
Fieldvue Engineering



DURATION	One (1) day
COST	A\$900.00 per person exclusive of GST
NUMBERS	Minimum 4 / maximum 6 participants
VALIDITY	2 years
REFRESHER	One (1) day - A\$150.00 per person exclusive of GST



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RELIEF VALVE - MAINTENANCE

Overview

Participants will gain knowledge of Function; Design; Operation; and the required maintenance procedures for safety relief valves.

Pre-Requisite

Trade and/or Engineering background

Learning Outcomes

At the conclusion of this course, participants will have knowledge of:

- Relief valve basics
- Relief valve performance issues
- Relief valve types and features
- General maintenance and testing procedures

Participant Numbers

It is recommended that a minimum of 4 participants attend up to a maximum of 6 participants

WPC reserves the right to cancel/postpone any course in which the minimum number of participants has not been achieved.

Logistics

Training can also be conducted on site, however, training equipment will need to be mobilised and will add to the cost of the course.

Training Dates

11 February 2010
6 May 2010
5 August 2010
4 November 2010

Suggested Further Training

Relief Valve Engineering
Basic Valve & DVC Engineering
Control Valve Technical/Practical



DURATION	One (1) day
COST	A\$900.00 per person exclusive of GST
NUMBERS	Minimum 4 / maximum 6 participants
VALIDITY	2 years
REFRESHER	Half day - A\$150.00 per person exclusive of GST



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FIELDVUE – ENGINEERING COURSE

Overview

Participants will gain understanding of technology available and where it can be applied within a process plant; complete diagnostic solution; how to utilise and its benefits.

Suggested People who will benefit from attending this course

- Engineers
- Planning Engineers
- Project Engineers
- Operations Engineers
- Managers dealing with FieldVue equipment

Learning Outcomes

At the conclusion of this course, participants will have knowledge of:

- The principle of operation and familiarisation of components;
- Construction modularity and interchange ability;
- Maintenance and valve diagnostics;
- Asset management; and
- Industrial application.

Participant Numbers

It is recommended that a minimum of 4 participants attend up to a maximum of 8 participants

WPC reserves the right to cancel/postpone any course in which the minimum number of participants has not been achieved.

Logistics

Training can also be conducted on site, however, training equipment will need to be mobilised and will add to the cost of the course.

Training Dates

15 April 2010
15 July 2010
21 October 2010

Suggested Further Training

Control Valve Engineering
Basic Valve & DVC Engineering
Relief Valve Engineering



DURATION	One (1) day
COST	A\$900.00 per person exclusive of GST
NUMBER	Minimum 4 / maximum 6 participants
VALIDITY	2 years
REFRESHER	Half day - A\$150.00 per person exclusive of GST



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FIELDVUE – TECHNICIANS INTRODUCTION COURSE

Overview

Participants on this course will be provided with training on the installation, calibration and commissioning of DVC's using Handheld Communicator and ValveLink software. Valve diagnostic analysis and fault diagnosis. All activities involve a practical "hands-on" approach.

Pre-Requisite

Industrial trade and/or engineering background.

Learning Outcomes

- At the conclusion of this course, participants will have knowledge of
- DVC Positioner basics: construction, principle of operation and familiarisation of components;
 - DVC installation, commissioning, using 375 field communicator;
 - DVC installation using Valvelink set-up Wizard: via HART/Foundation FieldBus;
 - DVC valve performance diagnostics; detailed analysis of valve signatures, stroking: full and partial (SIS);
 - DVC maintenance / fault finding process; and
 - Tag management: data save and reporting/printing.

Participant Numbers

It is recommended that a minimum of 4 participants attend up to a maximum of 6 participants

WPC reserves the right to cancel/postpone any course in which the minimum number of participants has not been achieved.

Logistics

Training can also be conducted on site, however, training equipment will need to be mobilised and will add to the cost of the course.

Training Dates

8 April 2010
8 July 2010
14 October 2010

Suggested Further Training

FieldVue Engineering
Control Valve Technical/Practical
Basic Valve & DVC Engineering
Relief Valve Maintenance



DURATION	One (1) day
COST	A\$900.00 per person exclusive of GST
NUMBERS	Minimum 4 / maximum 6 participants
VALIDITY	2 years
REFRESHER	Half day - A\$150.00 per person exclusive of GST



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INTERFACING FOUNDATION FIELDBUS DVC WITH DELTAV COURSE

(BY ARRANGEMENT)

Overview

This two (2) day course covers the integration of Foundation Fieldbus compliant devices using a DeltaV system. Some of the topics covered in the course will be:

- Foundation Fieldbus, Wiring and Installation;
- Segment Check Out Procedures;
- Familiarisation with Foundation Fieldbus Device Configuration;
- Fundamentals of Calibration for Foundation Fieldbus Devices; and
- Accessing Foundation Fieldbus Device Control Parameters.

Pre-Requisite

Participants should be familiar with conventional instrumentation and electrical practices and have basic Fieldbus knowledge.

Learning Outcomes

At the conclusion of this course, participants will be able to install, calibrate, configure and check out Foundation Fieldbus devices using the proper wiring practices.

Participant Numbers

It is recommended that a minimum of 4 participants attend up to a maximum of 6 participants

WPC reserves the right to cancel/postpone any course in which the minimum number of participants has not been achieved.

Training Dates

By arrangement.

Logistics

Training can also be conducted on site, however, training equipment will need to be mobilised and will add to the cost of the course.



DURATION	Two (2) days
COST	A\$1,800.00 per person exclusive of GST
NUMBERS	Minimum 4 / maximum 6 participants
VALIDITY	2 years
REFRESHER	One (1) day – A\$250.00 per person exclusive of GST



TRAINING COURSES 2010

YOUR REQUIREMENTS

WPC courses can be customised to suit your requirements and time schedules.

Training can also be conducted on site, however, training equipment will need to be mobilised and this will add to the cost of the course.

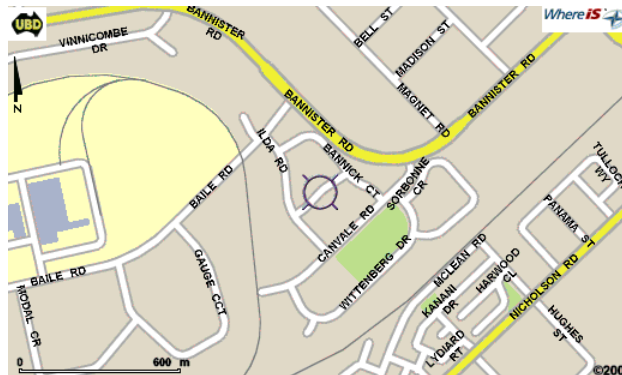
Courses are usually held at our modern and fully equipped premises in Canning Vale.

Most of the courses are designed for a minimum of 4 participants to a maximum of 6 or 8 participants.

Each participant will receive a Statement of Attainment on completion of course.

LOCATION AND PARKING

Western Process Controls is located at 1 Harvard Way, (cnr Ilda Road) Canning Vale.



REGISTER BY PHONE, FAX OR EMAIL

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