

Valve Automation

Valve Automation combines the strengths of seven world-recognized brands: Bettis, Dantorque, EIM, EL-O-Matic, FieldQ, Hytork and Shafer into a single unit. We capitalize on more than 100 years of combined experience dedicated to only one thing—controlling and automating valve operation. No one else can offer the breadth of product or the scope of service. As the world's leader in valve automation, we are constantly innovating and improving on the quality of our products and are able to augment our own resources with those of our colleagues in the Emerson organization.

Bettis™ Scotch – Yoke Products

Course: VA-MEA-101
Course Rate: \$2200

Overview:

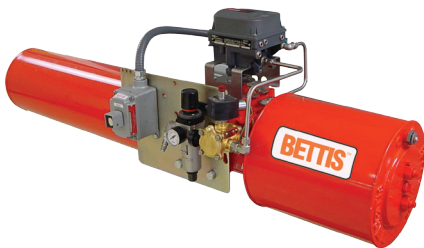
This 2 ½ day course provides an introduction to the range of pneumatic and hydraulic valve actuators manufactured by Bettis. In addition to discussing product features and benefits, students will be given a broad overview of the valve automation industry and provided with training on product selection and applications. Common pneumatic and hydraulic control components and systems will also be discussed.

Prerequisites:

Involved with the purchase / application / marketing or sales of products

Topics:

- CBB –Series Actuators overview
- CBA-300 - Series Actuators overview
- G-Series Actuators overview
- Torque Mechanisms overview
- Manual Overrides overview
- Actuator Selection/Sizing
- Common Control Components / Control Systems
- Valve Mounting Hardware Overview
- General Practical Work



EL-O-Matic™ & FieldQ™ Rack & Pinion Products

Course: VA-MEA-102
Course Rate: \$1500

Overview:

This 1 day course provides an introduction to the range of pneumatic valve actuators manufactured by EL-O-Matic and FieldQ. In addition to discussing product features and benefits, students will be given a broad overview of the valve automation industry and provided with training on product selection and applications.

Prerequisites:

Involved with the purchase / application / marketing or sales of products

Topics:

- Operating Principle
- E-Series Actuators overview
- P-Series Actuators overview
- Comparison of E & P Series Actuator
- 180-degrees Rotation Actuators
- FieldQ Actuators overview and features
- Comparison of FieldQ Actuators with Conventional Actuators
- Advantages of FieldQ Actuators
- Actuator Selection/Sizing



Shafer™ Rotary Vane Products

Course: VA-MEA-103
Course Rate: \$1500

Overview:

This 1 day course provides an introduction to Rotary Vane type valve actuators manufactured by Shafer. Also covers about SH Series Actuators. Primarily focussed on product features & benefits, sizing/ selection and applications.

Prerequisites:

Involved with the purchase / application / marketing or sales of products

Topics:

- Gas Pipeline Valve/Actuator Applications
- Rotary Vane Actuators
- Assembly of Rotary Vane and Travel Adjustments
- Poppet Block and Hand Pump
- Local Manual Control / Control Schematics
- Control Functions and Components:
 - High & Low Pressure shutoff;
 - 2-way electric & fail safe;
 - ESD
 - Pneumatic Line break devices
- Actuator sizing – Theory and Ex
- LineGuard 2000 Series
- SH Series Actuators
- Hydraulic Power Units



EIM™ Electric Actuators

Course: VA-MEA-104

Course Rate: \$1500

Overview:

This 1 day course provides information on the types of Electric Actuators in the EIM portfolio ranging from multi-turn to ¼ turn, the principles of operation, mechanical and electrical components, followed by a hands-on demonstration of actuator and Masterstation.

Prerequisites:

Involved with the purchase / application / marketing or sales of products

Topics:

History

Applications

Actuation Principles

- Mechanical
 - Electric Motor
 - Motor Gear Set
 - Clutch Assembly
 - Worm / Worm Gear Assembly
 - Geared Limit Drive Assembly
 - Torque Limit Drive Assembly
 - Stem Nut / Bushing with Locknut
- Electronic
 - Constant Health Monitoring – EFM
 - Absolute Position Detector – APD
 - Historical Data & Diagnostics
 - HMI Indication of all Parameters, 360° Rotation/ Moveable – LDM
 - Remote Display Unit for Inaccessible MOV's – RDM
 - Total Electronic Control – TEC
 - Discrete DI / DO, Analogue AI / AO, Digital, ESD, PST
 - Field Network Communications
 - Protection Features
 - Networks
 - Modbus Masterstation
- Hand-on Demonstration of setting up the actuator, limit switches and general configuration and interrogation.
- Understanding how all the components fit inside the actuator, assemble and disassemble.
- Demonstration of the Masterstation showing a redundant system.
- Questions and answer session.



Bettis™ Multiport Flow Selector (MPFS)

Course: VA-MEA-105

Course Rate: \$1500

Overview:

This 1 day course provides information on the Bettis MPFS, principles of operation, its applications and followed by a hands on demonstration.

Prerequisites:

Involved with the purchase / application / marketing or sales of products

Topics:

- Introduction
- Conventional Manifold with 2-way valves
- Conventional Manifold with 3-way valves
- Multiport Flow Selector Assembly Overview
- Plug seal components
- Model Size & Designations
- Electric actuator
- Advantages of MPFS
- Typical Installations
- Live Demo In Workshop

