Emerson Middle East and Africa

Services Catalogue







FISHER® FIELD & EDUCATIONAL SERVICES

Middle East and Africa

Over the years, Emerson has made significant investments in manufacturing facilities and service centers across the Middle East and Africa and is moving operations closer to customers. Emerson has three new manufacturing facilities close to its customer installed in Abu Dhabi, Jubail Saudi Arabia and Ras Laffan Qatar.

Cost pressure demands are expected to be met while simultaneously minimizing the risk to operations and maximizing production. There is nothing worse for an operations manager than when a valve designed and built ten years ago develops a sudden problem. The knock-on effects are huge.

Emerson has the expertise and experience to handle your control valve maintenance and repair, regardless of your industry. The way you manage your key production assets directly affects your facility's availability and profitability. The health and performance of your assets can determine your success in reaching your business goals.

Wherever you are in your plant's life cycle-startup, maximizing operation turnaround/outage, or life extension-Emerson Valve Services gives you experienced professionals and application expertise where you need them, when you need them for the following services:

- Start-Up and Commissioning Service
- Valve Diagnostics
- Severe Service Valve Repair and Overhaul Supervision
- Partial Stroke Testing and Commissioning for SIS and ESD Valves
- Outage and Shutdown Planning and Management
- Training: Factory, Regional and Onsite, Local Training

Maximize Your ROI:

With Emerson as your partner, we believe that we should offer you the value for your money and professional expertise to help you maximize your return on investment (ROI). We will perform our service and provide you evidence of payback on your investment, whether it be in weeks or months.

Flexible Quotation Options:

Sometimes, you have to work with a limited budget and control costs and risk and we at Emerson understand that. As your partner, we can assess your needs and risks and then tailor our quotations to include daily rates and lump sum options.

When considering your next startup or maintenance program, turn to the valve experts to help you maximize profit for your plant!

Emerson Valve Services & Education Team

Global Reach, Local Service

Start-Up and Commissioning Service

Antisurge and turbine bypass valves are an important part of your plant. They are specifically designed for the application. Should you trust just anybody to commission them?

The main function of these valves is to protect expensive machines, such as compressors or turbines, from damage during a plant upset. Emerson understands the requirements for performance and how to optimize these special valves.

Emerson has factory trained specialists with over 80 year's experience between them who are ready to help. Using an eleven point checklist

they will help ensure a smooth and trouble-free startup. They will also measure and retain important baseline diagnostics to help in the future using ValveLink $^{\text{TM}}$ software.

To ensure optimum performance and efficiency from Fisher valves, why not let us provide you with a quote for an Emerson process engineer to visit your facility and perform our pre-start commissioning service?

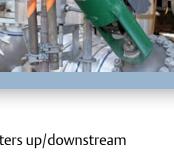
To make life easy we have designed a service program where there are:





Program Deliverables

- Ensure correct installation, correct pipe diameters up/downstream
- Ensure all connections are made correctly
- Ensure all pneumatic and electrical supplies are correct
- Check operation of handwheel, lock-ups, solenoids and relays
- Ensure the actuator is in good working order and operating correctly
- Check valve stroke is correct for either an air, electrical, or digital signal input
- Set up low air trip point and tune boosters
- Tune digital valve controller for optimum performance
- Digitally record speed and response tests
- Map the valve signature
- Issue a final report



Global Reach, Local Service

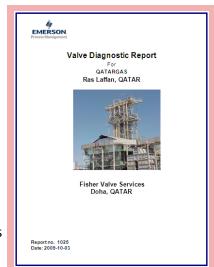
Valve Diagnostics

You want to keep your equipment operating at optimal levels. But what approach is best for your plant's life cycle? Run until failure or overhaul periodically?

Both are expensive. What if you could put your maintenance dollars into the instruments and valves that actually need repair – and identify them before they fail?

Predict the future of your control valves with Emerson valve diagnostics services:

- Identify equipment that needs repair before it causes problems
- Maximize uptime and strategize downtime
- Budget maintenance dollars more effectively
- Achieve life cycle goals with planned maintenance



With predictive diagnostics, you will know in advance which control valves need attention so you can optimize your maintenance plan for maximum efficiency during your turnaround.

Emerson control valve diagnostic services have been proven to significantly lower the cost of control valve maintenance. When control valve faults and calibration errors are identified early, you can focus maintenance efforts on the devices that actually need repair or tuning. You gain a plant with healthy valves and a shorter repair list during turnarounds.

Contracted Outage / Shutdown Support

When manpower or technical expertise requirements exceed your staff capabilities, Emerson is there to support you during critical times such as outages and plant shutdowns. Our team can supplement your specific valve requirements while allowing your staff to focus on their core competencies such as plant operation.

Emerson maintenance team comes with decades of experience helping customers like yourself.

Prior to your outage, we will do the following:

- Examine Your Outage Objectives/Constraints
- Review Your Application/Specification
- Audit Your Inventory
- Review Your Maintenance History



- Perform Valve Audit / Walkaround / Parts Survey
- Do a Diagnostics Screening, if Appropriate
- Pick Outage Team and Assign Responsibilities
- Provide Budget Estimate

Our proven process will support your turnaround and ensure that the control valves portion of your turnaround is done right, on schedule, and within budget. Put our technical and vast field experience to work for you. We will diagnose and fix only those assets that need adjustments or repairs. All the work we perform is documented and all aspects are then reviewed with the client.

FISHER® FIELD SERVICES

Global Reach, Local Service

Severe Service Valve Repair and Overhaul Supervision

Not all valves are equal. Emerson Fisher™ designs severe service valves for that arduous process, where a normal valve simply would not pass the test of time. Using technology such as Whisper Trim™, Cavitrol™ trim, and Dirty Service Trim (DST), these valves require special attention during plant maintenance turnarounds. Based in the Middle East, Emerson has factory trained specialists ready to help.

These engineers can work with our in-country service repair associates or your own valve repair shop to ensure these valves are brought back to factory standards, using tools such as ValveLink™ for valves with FIELDVUE digital valve controller fitted, or FlowScanner™ valve diagnostic system for valves with other pneumatic positioners. Our engineers can quality check the reassembled valve before it leaves the shop.

Any valve supervised by an Emerson engineer during repair that passes our quality checks, will carry the same warranty as a brand new valve that has just left the factory for the first time.

To ensure optimum performance and efficiency from your severe service Fisher valve, why not let us quote you for an Emerson process engineer to supervise your severe service valve overhaul? This will ensure that your valve has all the key items tested and give you peace of mind through the important plant startup phase or plant turnaround.









Global Reach, Local Service

Partial Stroke Testing and Commissioning for SIS Valves

In today's business world, plants have to run longer and harder between maintenance outages. How do you ensure your plant will shut down safely in the event of an emergency?

Safety systems are the last layer of protection. When an emergency shut down valve fails to move, the system fails altogether.

Using online partial stroke testing (PST) on the FIELDVUE® (Safety Instrumented System) digital valve control can safely extend the interval between full stroke testing and reduce the probability of failure on demand (PFD).



Emerson has designed over 1200 mounting brackets and linkages enabling the FIELDVUE digital valve controller to fit on most valves in the marketplace today.

To help you adopt a safer working environment, Emerson has factory certified experts who understand how to implement PST systems. Don't compromise your safety, let us quote you for an Emerson process engineer to visit your facility and perform our retrofit and commissioning service for SIS valves.

This will ensure that your emergency shut down valves have all the key items tested and give you peace of mind that the valve will operate when you most need it.



Program Deliverables

- Mount FIELDVUE digital valve controller and setup feedback linkage
- Pipe positioner, actuator, and solenoid vales
- Ensure all pneumatic and electrical supplies are correct
- Check operation of lock-ups, solenoids and relays
- Ensure actuator is in good working condition
- Configure, calibrate and tune digital valve controller for optimum performance
- Map the valve signature
- Program PST acceptable/failure limits
- Proof test PST system
- Digitally record trip speed
- Issue a final report



FISHER® EDUCATIONAL SERVICES

Middle East and Africa

With over half a century of training experience, Emerson Educational Services remains committed to providing quality training to its Middle East customers, when and where they need it.

Regional Middle East Training Centers

Our dedicated staff can help assess your company's training needs and design a suitable training program to help your group be successful with their valve assets. Each year, thousands of individuals attend courses at one of our regional training centers in the UAE, Qatar or Saudi Arabia.

On-Site, Local Training

Additionally, increasing numbers of students are attending customized on-site courses, minimizing time away from work and expensive travel and lodging costs. We can tailor training-in your local area-to meet your specific needs.

Regardless of which option your organization opts for, we strive to provide you the best learning experience possible.

The high quality of our instructors, training materials and programs is attested to by our acceptance into the IACET Authorized Provider membership. All courses taught in the Middle East are eligible for Continuing Education Units under the IACET scheme.





Fisher Education Program

Our course offerings include, but are not limited to, the following:

- Course 1300 Control Valve Engineering I
- Course 1350 Control Valve Engineering II
- Course 1400 Valve Technician I
- **Course 1451** Valve Maintenance w/ DVC Calibration
- **Course 1751** Fundamentals of FIELDVUE® Digital Instruments and Handheld Communicators
- Course 1752 ValveLink & Diagnostics for FIELDVUE®

 Operations
- Course 1759 ValveLink Diagnostics for FIELDVUE®

 Data Interpretation
- Course 1766 FIELDVUE® DVC 6000 SIS Setup with AMS ValveLink
- Course 7036 Fieldbus Digital Valve Controllers
- Course 7022 AMS Device Manager With Fisher® HART

For more details, please visit: www.emersonprocess.com/education











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