

# Maintaining and Retrofitting your Assets with Emerson's valve automation

## Why Retrofit?

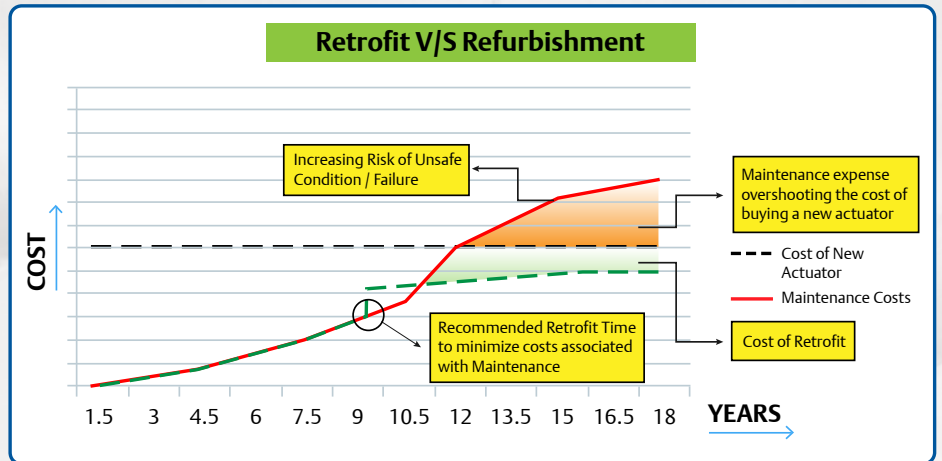
Actuators form a sizable investment of any plant. To ensure the smooth and efficient running of the plant and its processes, actuators must undergo routine maintenance and repair. This ensures that plant performance is high and safety standards are adhered to. Activities such as these will entail operational expenses periodically.

As time goes on, the costs required for maintenance and repair keep steadily increasing – often reaching the point where operating the actuator would be more expensive than just replacing the entire assembly. At this point, operating the actuator is a serious safety hazard and will decrease plant efficiency.

Retrofitting is a process of auditing actuators, and 'automating / re-automating' them to fit in Actuator Controls. This ensures that your plant is more efficiently controlled, and any changes in torque due to age & wear are addressed. This can be done on manual or automatic valves using *pneumatic, hydraulic, or more commonly, electric actuators*.

## Why Emerson?

- Retrofitting in line is a safe and cost effective solution that minimizes plant disruption.
- Emerson has experience in retrofitting actuators, including overhaul, repair and replacement of top automation that is already installed as part of existing plant.
- Working from basic valve data, we are able to offer sizing and selection to match existing valves, and replace existing actuators mounted across installations.
- Our design service is backed by a factory trained / certified installation service team, who are able to provide end-to-end installation and commissioning support.
- We undertake the identification, repair and replacement of aging assets.



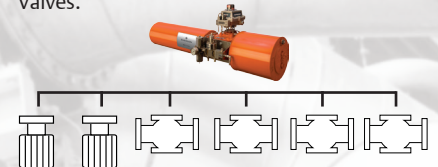
TEC2000 Actuator

## Retrofitting valves with new actuators and/or manual valves to automate them presents numerous advantages:

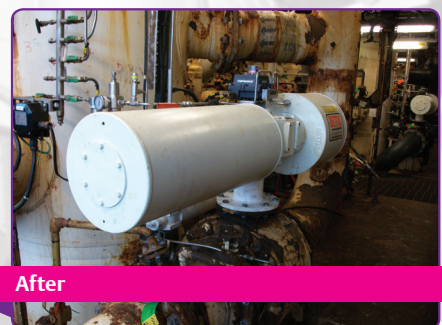
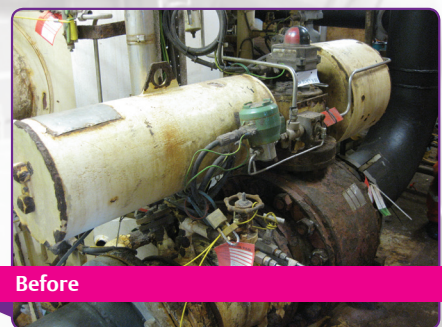
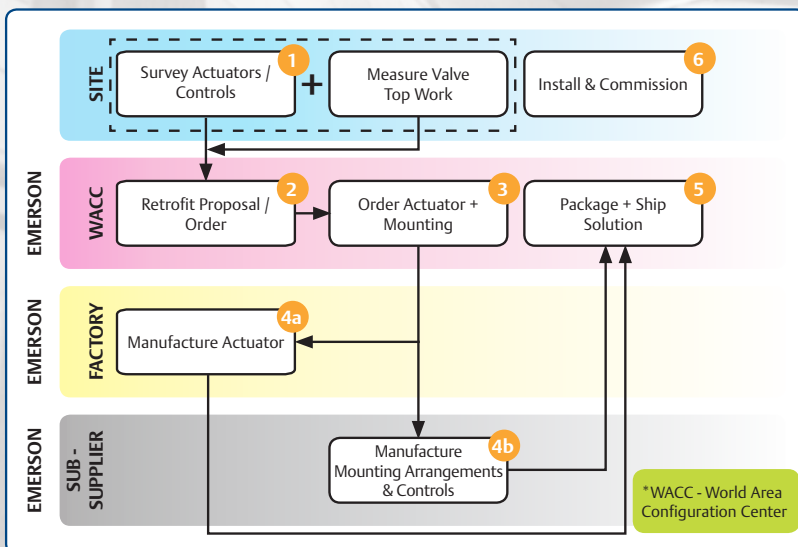
- Recalibrating muscle/actuation to ensure actuator operation, in line with changing valve torques
- Additional diagnostics to monitor the health of the valve
- Reduced operational / maintenance costs
- Increased safety and visibility on the health of the actuator

## Operating All Valves Everywhere

Valve Automation has expert capabilities in handling Retrofit and Refurbishment for all types of Valves such as Ball, Butterfly, Gate, Plug etc., as well as the automation of Manual Valves.



## The Process



## Types of Retrofit

- Complete valve & actuator replacement
- Actuator only replacement
- Automation of manual valves
- Refurbishment & miscellaneous

## Emerson's Valve Automation - Your Single Source in Middle East and Africa

- Local facilities with exceptional capabilities
- Local expertise and service excellence
- Certified plant standardization and efficiency
- Largest on/off Valve Operating System portfolio
- Broad product offering from renowned brands
- Local parts availability and quick shipping

**BETTIS™**

**SHAFER™**

**EIM™**

**EL-O-MATIC™**

**FieldQ**

**HYTORK™**

**DANTORQUE™**

**FISHER™**

**TOPWORX™**

**ASCO™**

## The Gold Seal Promise



Gold Seal service is a benefit that EIM customers have come to expect over the years. It represents the company's goal to consistently deliver its brand promise of providing reliable, quality products that are backed up by competent local service. The adopted Gold Seal quality standards and concept resonate through the manufacturing process and into our WACC, where a fair degree of integration and automation take place, and ultimately to customer locations where site commissioning work is performed. The Gold Seal philosophy is founded on an extensive service and maintenance training program that must be successfully completed by all personnel responsible for delivering this service to our customers.

The training program covers all EIM actuator maintenance and repair details, focusing on both mechanical and electrical aspects. Recertification is mandated every two years to ensure unparalleled, consistent customer service.

With Gold Seal expertise, our service personnel are also capable of providing essential support to network providers and beyond, to contribute to a successful plant start-up.

## Local Facilities with Vast Capabilities

Emerson has established world-class facilities in the Middle East and Africa region, along with an experienced distribution network. Our World Area Configuration Centers (WACC) in Jubail, Saudi Arabia; Dubai, U.A.E. and Johannesburg, South Africa, provide our clients with state-of-the-art manufacturing, assembly, integration and testing of globally recognized brands and proven systems for valve control.



## Expert Application Engineering and Complete Integration



To add further value to our brands, Emerson's Valve Automation has engineering and integration professionals in our facilities with extensive knowledge of both automation and control as well as applications in oil and gas and process industries. They are able to understand the unique needs of our clients to create specific Valve Operating Systems that are fit-for-purpose. Our team provides system for Emergency Shutdown (ESD), hydraulic Partial Stroke and Diagnostic Test (PST), and High Intensity Pressure Protection System (HIPPS), to name a few applications. We provide full Factory Acceptance Test (FAT), systems testing and staging, and can integrate full wireless capability for use in any facility. We assure that Emerson's high level of quality is always maintained. Our technical staff is available to support and advise our clients throughout the life of their system.



Scotch-Yoke pneumatic and hydraulic actuators



Electric actuators



Rotary Vane actuators



Rack and Pinion actuators



Wired and Wireless Automated Valve Package



The single valve automation solution



Helical Spline actuators

## Contact Us

P.O. Box 17033,  
Jebel Ali Free Zone  
Dubai, United Arab Emirates  
T +971 4 811 8100  
F +971 4 886 5465

P.O. Box 105958  
Abu Dhabi  
U.A.E.  
T +971 2 697 2000  
F +971 2 555 0364

P.O. Box 10305  
Jubail 31961  
Saudi Arabia  
T +966 3 340 8650  
F +966 3 340 8790

P.O. Box: 3070  
Al-Khobar 31952  
Saudi Arabia  
T +966 3 857 3157  
F +966 3 857 8491

P. O. Box 32281  
Doha  
Qatar  
T +974 4 576777  
F +974 4 315 448

24 Angus Crescent  
Longmeadow Business Estate East  
P.O. Box 6908; Greenstone; 1616  
Modderfontein, Extension 5  
South Africa  
T +27 11 451 3700  
F +27 11 451 3800

