Protecting your actuation process without compromise in severe applications

Bettis™ RGS-Series Pneumatic Actuators

Stainless steel actuators for high cycle, high speed, and extreme temperature applications

EMERSON™
Process Management

Unscheduled disruption in the production can end up costing significant time and money

Extreme and corrosive environment is a costly fact of life in any industry. Surface deterioration of the metal components can lead to premature and often sudden failure with the risk of costly, unscheduled downtime. The greater difficulty maintaining components in increasingly remote and challenging environments requires the need for extended component life. Components which have enhanced resistance to the effects of extreme applications are now essential as they increase service life and reduce the need for expensive maintenance.

With an issue as significant in terms of both cost and productivity, you cannot afford to think in terms of rectification. You need an ultimate solution.

"Corrosion-related failures in the process industries all too often result in catastrophic failures of piping and equipment. Corrosion is not only dangerous but costly, with annual damages in the billions of dollars!"
–Corrosion Engineering Handbook Second Edition

"60% of all safety incidents occurred when a maintenance job was executed as reactive."
–Production and Operations Management by SN Chary

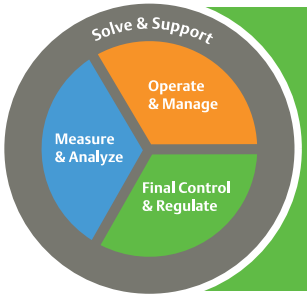
"Plants spent more than $1.2 trillion maintaining their critical plant systems with about one third of these maintenance dollars being wasted through ineffective maintenance management methods."

What if extreme environments fail to cause premature failure to your actuator and you could focus on your production with uninterrupted processes?

The Bettis™ RGS is crafted without compromise to ensure reliability of your valve assets

Bettis™ RGS stainless steel actuators thrive where other actuators fail. Its inherently force and weight balanced design makes it ideal for throttling applications, without the corrosion and side loading issues of other actuators. The RGS performs regardless of where it's installed.

BETTIS™



Everyday you need rotary pneumatic actuators that are build for extreme applications without constant attention and maintenance. Emerson provides you with highly engineered products that perform where others fail. As part of Emerson's Final Control and Regulate category, Bettis RGS stainless steel construction is force/weight balanced in a smaller footprint. Gain the reliability you've always wanted in an actuator withe Bettis RGS. Make actuation failures a thing of the past.

Actuation • Control Valves • Isolation Valves
Regulators & Relief Valves • Valve Instrumentation & Accessories

We have approximately 1,000 actuators installed on seven vessels with the earliest installation dating back to 2001. It is still true that there has been no reported failures in all this time. I have asked our maintenance and field personnel on each vessel about the actuators and have never received a negative comment or feedback.
–Scott Lambert, Group Leader Stimulation Mechanical Engineering, Baker Hughes

Corrosive environment may contribute to premature actuator failure

RGS actuators are not like normal actuators. Constructed entirely of stainless steel, the RGS can handle harsh, corrosive environments like Naval submerged brine plant filter systems with high vibrations, pulp & paper "wet" areas, mining lime lines, acid plant valves, slurry valves, caustic wash down, and food processing. It's robust, rugged, and reliable.

Optimizing plant performance with reliable product quality

The balance between improving quality and optimizing operating cost often results in choosing an actuator that increases the variability of your process. Bettis RGS actuator design addresses issues with high dead band, frictional torque, valve and actuator shaft twist, poor tolerances and loose mechanical connections while providing outstanding performance.

Reduce maintenance and operating costs with no loss in production time

RGS is designed to eliminate normal failure modes such as side load forces, sliding parts and numerous seals. With a very rugged mechanical design, it consistently demonstrate the ability to last for long periods of time. Proven results show customers report years of service without failures and no loss in production time.

Protecting the safety of personnel and the environment

Protecting the environment and personnel is critical. Make your plant a safer place with the RGS actuator and its safety features.

In extreme environments, use modern valve actuators to eliminate unscheduled downtime

You don't have to accept difficult operating conditions as a limitation to reliable automated or control valve performance. Corrosion resistant materials of construction mean that you will not have to compromise to get maximum availability from your valve assets. Most actuators are not designed to withstand the extreme ambient heat surrounding a boiler or the severe cold of an arctic environment. The Bettis RGS actuator is designed to perform in extreme operating temperatures from -51°C to 232° C (-60°F to 450°F).

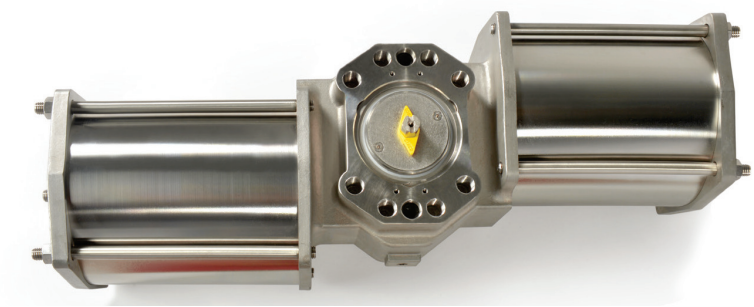
What's your challenge?

How much sooner could you complete a maintenance turnaround if you did not have to tear down and inspect your valve actuators on a periodic basis?

What's your opportunity?

Minimize the cost to maintain your essential automated valve assets by eliminating the need to perform maintenance on your actuators.

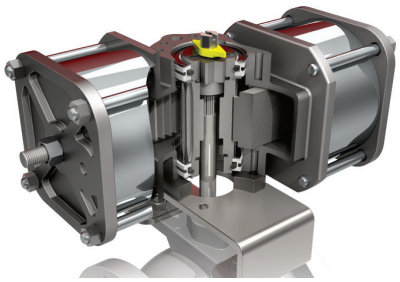
Designed and built for high performance



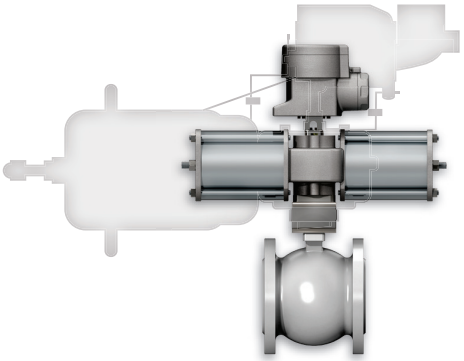
All stainless steel construction suitable for the harshest and most corrosive environments

Minimize process variability caused by poor performing control valves

Extremely low internal friction, minimal air consumption, and able to handle severe vibration

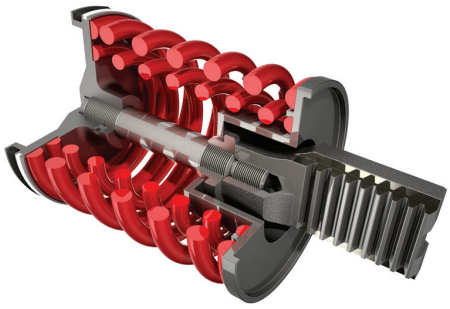


“Close Mount” design reduces size, weight and cost by passing the valve stem through the actuator shaft

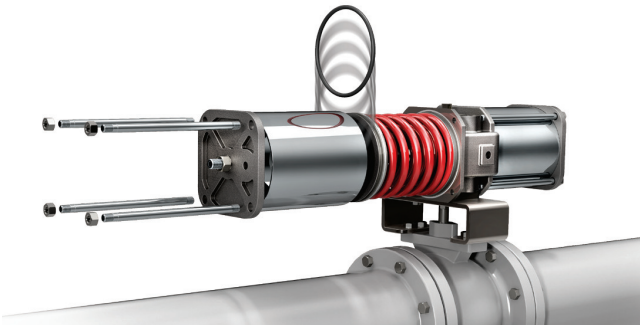


An excellent substitute for diaphragm actuators with proven throttling capabilities in a compact size

Operate efficiently without compromising safety



Springs are captured and contained within the force module even if the end cap and cylinder are removed



Allows for all seals to be replaced in the field while the actuator is still mounted to the valve

For interactive experience, visit www.emersonprocess.com/BettisRGS