Ensure your critical equipment is properly isolated in severe service applications.

YAT.

Fisher™ Z500 Severe Service Ball Valves Avoid expensive consequences that can result from process leakage, operating with manual processes, and ineffectively prioritizing unit services.



Meeting targets seems daunting when your process is manual and results are unpredictable.

You've got a lot of challenges facing you in today's process control landscape. Excessive process leakage, a lack of automated products and processes, and difficulty identifying and coordinating service needs prevent you from exceeding your compliance, performance, and profit targets. Without a way to detect leaks in your lines or avoid human errors, managing your assets becomes an even more complex task. Many isolation valves are manually operated with little to no insight into their position. This lack of position feedback may force you to use plant personnel to confirm a valve's status, requiring extra time and exposing them to potentially hazardous conditions. Operating with aging equipment only accentuates operational inefficiencies. In order to overcome these obstacles and successfully meet production goals, you need to find attainable solutions.

"A large plant can incur losses of \$5,000 to \$10,000 (USD) per day—or more—due to process leakage." -ChemicalProcessing.com

"9 out of 10 plant personnel have experienced manual valves that were left in the wrong position." –Vernon Research Group

"Global processing industries have reported losing \$20 billion (USD) each year (or nearly 5 percent of their total production) due to unscheduled downtime; 80 percent of those losses are preventable." –ARC Advisory Group







What if you could achieve tighter, more reliable shutoff and protect critical equipment from damage; automate your valve and instrumentation to increase the reliability of your processes; and ensure you're getting the most out of your assets without running them to failure?

With the Fisher Z500 metal-seated ball valve, you can reduce process leakage and streamline your manual processes.





The combination of the Fisher Z500 metal-seated ball valve, Emerson actuation and instrumentation, and the Emerson service network allows you to reduce operating expenses by increasing process efficiency and equipment availability. You'll get complete insight into your installed assets within your unit and beyond, while gaining the capability to prevent or mitigate valve leakage. At the core of the solutions are new approaches to enhancing personnel effectiveness that will make it easier for your skilled staff to do more for their specific units.

FISHER



Working with a trusted advisor is a key factor in being able to operate a safe and reliable plant. Emerson provides you with highly reliable final control technologies and lifecycle services to help you take care of your process with certainty. The Fisher Z500 metal-seated ball valve provides an adaptable solution to help you keep your critical processes under control, even in the most demanding severe service applications.

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



Protect assets from leakage to enhance quality and production.

"Isolation valves are often the last line of defense before a potentially expensive leakage-related incident occurs. This makes it even more important to have one you can rely on." —Leah Stanley, Emerson Rotary Product Expert

Minimize leakage ► p5

Receive comprehensive service to lengthen plant availability.

"The simplicity of the Fisher Z500 valve makes it easy for our customers to install and use, and the 24/7 local service gives them the peace of mind that technical support is never far away." —Damon Meadows, Emerson Lifecycle Services Expert

Prioritize service ► p7

Automate your process to maximize personnel efficiency.

"Our customers continue to be resilient and find ways to do more with less in the face of adversity. We can help them leverage Emerson's best-in-class technology, that allows their teams to keep better tabs on their critical assets and identify potential issues before their production is affected."—Brandon Howard, Experitec, Emerson Local Business Partner

Streamline processes ► p9



Protect assets from leakage to enhance production and QUALITY.

Valves that leak internally can lead to major losses of valuable product, or unintended transfer of process particulate, in some cases seriously elevating process risks. For example, small globe valves installed in isolation service have one of the highest failure rates of any equipment in power plants. It is not uncommon for maintenance personnel to have to replace these valves as frequently as every six months. To keep pace with continually increasing industry demands over the last decade, conditions are getting more extreme and often lead to a higher likelihood of system equipment failure.

What's your challenge?

"A large plant can incur losses of \$5,000 to \$10,000 per day—or more—due to internal leakage." –ChemicalProcessing.com



What's your opportunity?

With design features that eliminate potential leak paths, safeguard against misalignment issues, and hold up against extreme temperatures and conditions, the Fisher Z500 metal-seated ball valve can help you produce more for longer.

Maintain zero leakage for longer



Spring Protector and Bi-directional Seat allow sealing capability from both flow directions so that if reverse pressure is applied, the seal is maintained.



Unique Ball and Shaft Design provides a larger shaft slot and expanded seating surface for better sealing and a highly reliable connection.

Extend valve service life and increase reliability



Advanced Coating Options are uniquely bonded on the sealing components for added durability in harsh service conditions and high-cycle applications.

 \sim



Integral Metal Seat means there is no cavity behind the seat, which eliminates a potential leak path and helps prevent leakage issues that could jeopardize downstream assets and process variability.

Identify leakage in-line before your process is affected



Valve Seat Leak Detection identifies potential problems before they affect the safety and profitability of your operations.





Automate your process to maximize personnel EFFICIENCY.

Increasingly, businesses in processing, manufacturing, and testing are turning to automation to cut costs and increase production. Because you have no time for manual processes, you are constantly looking for opportunities to automate with products and solutions that are easy to maintain and easy for personnel to understand. Too often, valve behavior—past, present, and future—is a mystery requiring manual intervention from plant operators. Unless you find a way to achieve greater insight to the health and operational status of your equipment and processes, your productivity is not sustainable. Manual equipment checks can be time-consuming and labor-intensive, often imprecise, and may pose unnecessary safety risks to your personnel, especially if equipment is placed in hazardous locations or orientations.

What's your challenge?

iiiii iiiii

"9 out of 10 plant personnel have experienced manual valves that were left in the wrong position." –Vernon Research Group



What's your opportunity?

With Emerson, you can get a completely automated valve and instrument solution to boost your confidence in the reliability and performance of your assets, save you the time of sending someone out to do manual field checks, and reduce human error or avoidable safety incidents.

Be confident in your valve's position and performance



Asset Insight and Monitoring Capabilities allow you to use tools like TopWorx[™] positioners and FIELDVUE[™] valve controllers to spot and solve problems before they occur.



Wireless Technology provides remote indication of your valve's position during startups, shutdowns, or other crucial plant activities without having to send someone out to visually confirm.

Reduce risk and unplanned spending



Complete Automated Solution provides you with a single point of accountability for pairing your Fisher Z500 valve with a Bettis[™] scotch yoke, electric, or rack and pinion actuator.

 \sim



Working Documentation for All Assets means you can get up-to-date tracking reports on each asset in your unit, including maintenance history, inventory records, and recommended actions.





Receive comprehensive service to lengthen plant AVAILABILITY.

Determining where, when, and how you can secure the right resources for your next turnaround can be a struggle. Your turnarounds are becoming increasingly intricate, and there is a decreasing window of opportunity to go in and service your assets. If your equipment or personnel is deficient or out of place, you could find yourself waiting anxiously to solve the situation—while your target startup passes you by.

What's your challenge?



"Global processing industries lose \$20 billion (USD) each year (or nearly 5 percent of their total production) due to unscheduled downtime; 80 percent of those losses are preventable." –ARC Advisory Group

What's your opportunity?



With local services, you can minimize your risk of unplanned downtime and proactively monitor and manage your assets. You need every advantage you can get to ensure everything is in place when you need it to be.

Be confident in your valve's position and performance





Lifecycle Services help you minimize your risk of unplanned downtime with 24/7 access to local service technicians prepared to handle your unique application or site challenges.

Educational Services provide your operators and technicians with the knowledge and skills to succeed with training platforms when, where, and how you need them.

Reduce risk and unplanned spending



The Six Step Turnaround Process is driven by certified technicians and your local Emerson representative to help you meet tighter outage schedules and better manage your risk of potential delays.

 \searrow



The Simplistic Design of the Fisher Z500 valve has less internal components to help ensure training is easier, inventory management is simpler, excess wear and process damage is minimized, and maintenance requirements are reduced.



Ensure your critical equipment is properly isolated in severe service applications.



FISHER[™]

Emerson Process Management Fisher

Marshalltown, Iowa, 50158 USA Sorocaba, 18087 Brazil Cernay, 68700 France Dubai, United Arab Emirates Singapore 128461 Singapore



E

in

Facebook.com/FisherValves

LinkedIn.com/groups/Fisher-3941826

Twitter.com/FisherValves

© 2015 Fisher Controls International LLC. All rights reserved. Fisher, TopWorx, FIELDVUE, and Bettis are marks owned by one of the companies in the Emerson Process Management business unit of Emerson Electric Co. Emerson Process Management, Emerson, and the Emerson logo are trademarks and service marks of Emerson Electric Co. All other marks are the property of their respective owners. The contents of this publication are presented for informational purposes only, and while every effort has been made to ensure their accuracy, nothing herein is to be construed as a warranty or guarantee, express or implied, regarding the products or services described herein or their use, performance, merchantability or fitness for a particular purpose. Individual results may vary. All sales are governed by our terms and conditions, which are available upon request. We reserve the right to modify or improve the designs or specifications of our products at any time without notice. Responsibility for proper selection, use and maintenance of any product or service remains solely with the purchaser and end user. D352374X012 / MB882 / Oct15



EMERSON. CONSIDER IT SOLVED.

With the Fisher Z500 metal-seated ball valve, you can minimize process leakage, streamline your manual processes, and better prioritize your unit services.