## LOW | Volume 9.3 September September 2023

# Meet Will Cashaw -

### Our newest Customer Care and Service Associate

To bolster our inside sales and service capabilities, we recently hired this Duquesne University Marketing graduate, who brings almost 15 years of proven and trusted Customer Care and Support experience to our current team of Customer Service Representatives: Char Konzier, Grace Steele, and Kara Hazelbaker.

While serving as a Senior Customer Service Advocate at Cigna, a major healthcare concern, Will worked extensively to resolve patient-provider issues. He also played a key role on the company's Customer Retention committee, gaining key insights on just what's truly important to not only maintain, but grow, a business. Will performed similar duties in the banking industry as well.

In his spare time, this Moon resident enjoys following the NFL and NBA, particularly the Philadelphia 76ers, listening to music, and, most of all, spending time with his family.

# A Better Place

Swagelok Company and its 225 global Sales and Service Centers are passionately dedicated to helping you reduce fugitive emissions in your ongoing sustainability efforts to reach Net Zero.

#### How we support a cleaner and safer environment:

- Creating and/or improving your fluid-system designs via our leak-tight products, stringent validation testing, and our dedicated/continuous focus on your overall compliance goals.
- Determining the "right" type of process fluid sampling solution: troubleshooting, design consultation, or our unparalleled, simple-to-install/maintain pre-engineered sampling systems.
- Expert product recommendations per use: Our certified Swagelok Field Engineers conduct comprehensive energy emission surveys to detect faulty connections and identify process efficiency opportunities. We even provide a highly detailed and easily actionable post-audit report.

## **DID YOU KNOW:**

Each year, our factories recycle more than:

- 100 tons of wood pallets
- 7 tons of paper
- 18,000 pounds of alloys

We also internally recycle and refine our process by-products, including metal chips, lubricants, and coolants.







# **Proven Process Optimization**

Sure, we make and sell premium-quality components. But what we really deliver are system solutions that will keep you safe, efficient, and profitable, no matter how challenging your industrial applications:



### GRAB SAMPLING SYSTEMS

We offer an array of system configurations to meet the unique needs of your application. Our closed-loop solutions deliver pressurized samples into pressure-rated cylinders; our liquid systems enable you to collect process fluid into glass lab bottles for analysis.



## MECHANICAL SEAL SUPPORT SYSTEMS

Our kits and assemblies are available in a variety of API plan configurations – each built to exacting API 682 standards with greatly minimized connections and pipe threads to avoid dangerous/costly leakage.



## GAS DISTRIBUTION SYSTEMS

Get gases from a highpressure source to where they need to go at your application's specified flow and pressure rate. Ask about our four panel types: Swagelok Source Inlet, Swagelok Gas, Swagelok Changeover, and Swagelok Point-of-Use.





# ONE GOOD TURN TOWARD MAXIMIZED SYSTEM PRODUCTIVITY

Swagelok Valves, offered in numerous styles and sizes, are your first choice for safe, leak-tight operation in even the most challenging Oil and Gas, Chemical, Power, Steel, Research, and General Industrial applications.

But, sometimes, knowing exactly which type is the best per use is not that readily apparent. For instance, do you need to stop flow? Start flow? Control flow direction? Regulate flow level? These and other basic questions are critical to consider and answer prior to making a selection that will deliver your expected results.



On / Off: Start or stop the flow of liquid.



**Directional Control:** Ensure that flow is headed in desired direction.

Let's first review what Valves do:



**Overpressure Protection:** Prevents system pressure buildup beyond a set limit.



Flow Control: Help adjust the flow through a system.



Excess Flow Control: Contain uncontrolled release of system media.

#### Next, match the corresponding model with your requirement:

#### **Ball Valves**

Can be used in a wide array of applications - from general-purpose to alternative fuel service - to control system flow. Available as on/off, switching, or crossover and can be made or configured to address a vast range of specifications.



#### **Plug Valves**



Deliver full flow and positive shutoff in a compact design.

**Diaphragm-Sealed** 

#### **Relief Valves**

Safeguard against overpressure.

#### **Check Valves**

Control back flow in general-service and high-purity applications.

#### **Bellows-Sealed Valves**



and facilitate purging with a fully swept flow path for improved system efficiency and effective flow shutoff.

Minimize entrapment



Employ a packless design and welded seal to prevent leaks to atmosphere in general and highpurity service.

#### Lastly, apply our STAMPED methodology to ensure that you've accounted for all key parameters around your ultimate decision:



= Size What's the desired/required flow rate of your system? The size of your valve must have a flow capacity to accommodate such. Also: What size orifice is needed? How much flow resistance is required?

= Temperature Key: Will these be constant or subjected to frequent changes? The answer should influence your valve choice and how often preventative maintenance will be required.



= Media Your system media must be compatible with the makeup of your bodies, seats, stem tips, and more. Also consider where the valve will be placed into service and, thus, subjected to weather variances.



= End Connection Multiple choices available: tube fittings, pipe threads, flanges, welded ends... Just be certain, to avoid leakage, that whatever you select is sized correctly and can handle your system pressure and temperature.

= **Delivery** Simply: When do you need them? How many do you need?



Now....All in one convenient place: See the latest Swagelok product and strategic support services innovations – and how we can significantly improve your safety and performance... bookmark https://pittsburgh.swagelok.com/Resources

#### **CASE STUDIES**

Hear directly from customers we've positively impacted in the Oil & Gas/ Midstream, Chemical & Refining, Steel, Power Generation, Research, and other industrial markets.

#### EMAIL BLAST LIBRARY

You frequently receive these throughout each month. But here's your place to revisit them to ensure that you did not miss a single edition about our newest and most innovative solutions to significantly reduce your operational risks, budgets, and logistics.

#### **INSTRUCTIONAL BRIEFS**

Choose from our vast selection of Swagelok Blog compact recaps that detail new and highly cost-effective ways to do your fluidhandling projects more safely and efficiently.

#### **TECH TIP VIDEOS**

See how the global Swagelok Pros perform challenging tasks from tube bending to componentry maintenance. For example, watch how our master tube benders operate a benchtop bender to make large, complex bends!

#### **QUICK-LOOKS**

View our wide array of short videos that tell – and show – you how we are dramatically different versus other product-only suppliers, especially when it comes to genuine application expertise.

#### SOCIAL MEDIA REELS

These take just seconds to view...but they provide a window into our overall Safety Training, Design and Build/ Fabrication, and Warehousing capabilities that will deliver a healthier Bottom Line for you, with each and every interaction with us.

## **Customer Challenge:**

(EIGHTH IN A SERIES)

FINEST IN THE FIELD

A major European energy company, with massive plans to expand its Hydrogen production and storage capabilities, faced a major impediment: How to contain and compress the element's extremely small molecules under pressure – in a leak-tight environment?



In addition, the firm wanted to demonstrate that Hydrogen could be "completely made out of renewable resources and stored for future use," unlike other forms of green energy. But securely storing the fuel and preventing the hydrogen molecules from attacking and cracking hard steel containment materials presented a dual threat to the organization's overall global objective to grow its business around this plentiful, easy-to-extract, zero CO<sub>2</sub> emissions gas.

## **Our Solution:**

Swagelok FK medium/high-pressure, simpleto-install tube fittings, specifically designed for Hydrogen service with their high nickel content, worked in conjunction with our custom-made Needle and Ball Valves, to save substantial labor time and cost, delivering superior performance and efficiency in all critical applications. Plus, Swagelok's long-time, highly collaborative relationship with the account, including Field Engineering expertise and proven masterfully fabricated Grab Sampling Panels, enabled a true partnership approach from the project's initial notes/sketches to completion.



**Bottom Line:** The site now feels even more confidence moving forward with Swagelok as a trusted resource for competencies that couldn't be supplied from other vendors or from within. Our customer proclaimed a genuine sense of pride for the joint work toward helping the world transition to green energy and a more sustainable future.

Read the full story at: https://www.swagelok.com/en/blog/everfuel-hydrogen-facility-interview

## PLAN FIRST, SAVE LATER

## How can you know when it's truly time to change your Industrial Hoses?

You certainly don't want to wait too long and run the risk of system failure. But swapping out too early means lost uptime and money.

**SOLUTION:** Establish a comprehensive Hose Maintenance schedule so you can track service life, installation and inspection history, location of replacements, operating pressures, necessary movement, and many more critical factors. This exercise isn't usually easy and will take considerable time, but will eventually yield substantial cost and labor savings.

## **7 STEPS TO BOOSTING YOUR** Hose Performance and Profitability:

## STEP 1

#### **Know Your Hoses**

Conduct a full site audit to identify and tag every hose in use. Note the hose type, part number, process fluid involved, pressure/temperature ratings, and vendor name and contact information. In your chart, log each hose's size, length, core material/construction, reinforcement layers, end connections, mounting, cover type, operating conditions, cleaning procedures, and the exact date the hose was installed and due to be replaced.



#### Track the Lifecycle of Each Hose

Stay on a strict schedule of regular hose inspections, according to the guidelines provided by your hose supplier. Look closely for signs of wear: scrapes, cuts, corrosion, kinks, and deterioration... these are all indications the hose likely needs to be replaced. If a hose fails during operation, document each critical detail: where on the hose it failed, the severity of the break, and how was the hose mounted.

#### Eliminate Hose Strain

When performing an inspection while hoses are operating, note any conditions causing major strain. Are your hose rubbing against equipment, experiencing pulsing, exposed to heat sources?

# STEP **4**

STEP 5

STEP 6

STEP 3

#### Know if a Protective Cover is Needed

A **thermosleeve** effectively guards a hose from weld splatter and resists UV light effects; a **fire jacket** provides excellent insulation from internal fluid temperature extremes; a **spiral guard** retards abrasion; and an **armor guard** or a **spring guard** protects against kinking and abrasion.

#### Follow Inspection and Replacement Protocols

Even after you determine your changeout intervals, continue to periodically inspect your hoses to ensure that system changes have not placed additional strain on your hoses.

#### Scrutinize Your Data

It could become necessary to adjust your inspection/replacement intervals (as you continually analyze your charts) for safety and/or budgetary reasons. Perhaps even perform a destructive test to learn if you replaced a hose too early or too late. Data review will also tell you that a routinely troublesome hose might require a different style for longer life in your application.



Inspect hoses



### Make Sure to Keep Spares

Once you finalize your replacement intervals, you can more confidently order/inventory replacements, especially for hoses that are critical for safety and process applications, those that are most likely to fail, and those that are difficult or timely to source.



Twisting a hose or bending it on more than one plane



Cover fraying and needs to be replaced



# BACK -toschool

Book your late-2023 or early-2024 Swagelok Safety Training event now: **Our 14-seat**, **leading-edge Training Center in Pittsburgh OR at your facility or worksite**...same unit price! We supply all class materials; you simply need to get your Technicians, Engineers, or other students to the desired place at the designated time/date.

No one prepares you better on how to safely and properly assemble a fluid system – from tube fitting installation through tube bending of various materials and diameters. **We also offer Valve and Hose Essentials courses** that will teach you how to choose, implement, and maintain the ideal components for your specific conditions and applications.



Now I have the confidence to do any bending job given to me."

"The instructor takes safety and tube bending to another level.

"You held my interest the entire day."



Our Essentials Series

- 1 Day Fitting Installation & Tube Bending
- 1 Day Fitting Inspection & Tube Bending
- 1/2 Day Fitting Installation & Inspection
- <sup>1</sup>/<sub>2</sub> Day Valve Selection & Maintenance
- 1/2 Day Hose Selection & Maintenance



Our Masters Series

- 4 Days Advanced Tube Bending
- 5 Days Orbital Welding
- 1 Day Materials Science



#### Our Process Analyzer Series

- 2 Days Sampling System Problem-Solving & Maintenance
- 5 Days Process Analyzer Sampling Systems/PASS 1
- 5 Days Process Analyzer Sampling Systems/PASS Sub-Systems
- 5 Days Process Analyzer Sampling Systems/PASS Plus

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