

Swagelok products meet strict manufacturing quality requirements to ensure that products perform optimally and consistently – without failure. Several of our products also meet or exceed compliance and standard measures including AGA, CGA, CSA, ECE, ISO, NGV, and PED to name a few.

Please contact your local Swagelok authorised sales and service centre to find appropriate product solutions for your system.



# Solutions Guide Procurement eBusiness Solutions, Cost of Ownership Emergency Product Delivery Service Large Scale Inventory Management, Inventory Consignment

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### Procurement

Our global capabilities and local availability ensure that you get the products, service and attention you need where you need it, when you need it. Around the world, Swagelok has 200 authorised sales and service centres with expertise to help you conserve costs and resources.

Swagelok can offer you complete supply chain and project management capabilities. We can make you more competitive in the industry through:

#### eBusiness Solutions

We offer a broad range of flexible, seamless, and convenient EDI transaction options and you can be sure of a solution to help you manage your procurement operations effectively.

#### Cost of Ownership

We recognise that our success is dependent on the continued long term viability of our customer, we focus on supplying the best product for your situation that provides long term service and reliability.

#### **Emergency Product Delivery Service**

We'll deliver products, back up equipment and service around the clock, seven days a week, 365 days a year.

#### Large Scale Inventory Management

We'll synchronise with your other suppliers in your supply chain to manage inventory at your site so the products you need are always available.

#### **Inventory Consignment**

We'll keep inventory onsite but not on your books until you need it.





## Procurement

#### Consolidated shipments

Ask how Swagelok can help reduce your logistics costs by driving down the number of individual shipments you receive at your job site. Additionally, if you purchase on line from the Swagelok website you can select "Ship Complete" to help reduce back-orders.

#### Just in time (JIT) delivery

Timely product availability is critical to your project's success – to avoid downtime or additional freight charges. Swagelok maintains a large local product inventory to ensure that you receive products when you need them. Let your Swagelok representative know when you need a product delivered and we will make sure it's delivered on time. Just-in-time delivery is just one more way that we can help you reduce the time and cost of maintaining a reliable supply chain.

At every step in the procurement cycle Swagelok JIT delivery system can help you manage supply chain costs – including:

Inventory
Processing
Freight, and more

Scheduling Receiving

If you utilise the Swagelok website to order components on-line, typical delivery information is provided for every part on the orders you place.

JIT delivery is one more way that Swagelok is working to be your "no surprises" supplier.

## Procurement

#### Shipment tracking

Every time you place an order with Swagelok, we link your purchase order number to the freight carrier to simplify tracking your shipment. Additionally, we can provide a month-by-month report that tracks the items purchased and quantities delivered.

#### Custom Kitting, Custom Labelling and Packaging

Custom Packaging and Kitting services will streamline your production and decrease your labour costs. Our service can take away the often overwhelming task of tracking and managing multiple parts and materials. Now, with Swagelok Custom Packaging and Kitting services you can order a variety of parts with a single part number, counting on the quality of Swagelok service custom packaging. We stick to the highest quality standards for machine and hand-packed kits or custom packaging. Kits can include multiple parts as well as instruction sheets, material certs, marketing materials and more. Swagelok can even handle the professional printing of those documents for you!

You should consider kitting if you:

- Are currently kitting in-house now
- Want to cut down on labor costs
- Want to streamline production
- Want to reduce packaging content errors and costs from lost parts
- Order the parts repeatedly for use in the same location
- Provide parts and/or printed materials with your product to be used by the customer

# Engineering

Swagelok offers a clear advantage in a challenging industry – the highest quality fluid system components on the market. With Swagelok, you can count on trouble-free assembly and leak-tight performance, even under harsh and difficult conditions.

#### NGV Global Application Specialists

In recognition of the importance of alternative fuels to many economies, Swagelok has a dedicated experienced team of NGV experts supporting our distributors and advising of best practice when servicing the alternative fuels industries in their region.

#### Design Support and Assistance

We offer hose advisory, product selection, and asset management services that enable you to select and maintain products for your system so you can operate productively and efficiently.

#### Live Electronic Catalogue

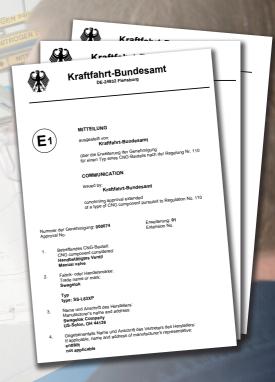
Swagelok catalogues, technical bulletins, installation instructions, videos, archives and more right at your fingertips. All information is stored and indexed for easy access.

#### **Engineered to Order Products**

When a product is a close match for your system but needs a few changes to be a perfect match, our Engineered-To-Order Products (ETOPs) are tailored to your specifications. ETOPs are one-of-a-kind parts.

#### Certifications

Swagelok products meet strict manufacturing quality requirements to ensure that products perform optimally and consistently – without failure. Several of our products also meet or exceed compliance and standard measures including AGA, CGA, CSA, ECE, ISO, NGV, and PED to name a few.





# Engineering

#### **Product Test Reports**

Swagelok validates product performance through a number of tests and publishes product test reports (PTR) that detail their performance under a variety of conditions. We can perform tests for specific products and conditions to assist you in product selection and will make available a customer test report (CTR) summarising the results.

#### **Custom Solution Fabrications**

Whether you're involved in CNG/NGV infrastructure, heavy or light duty applications, our associates can optimise and fabricate customised solutions based on your specifications. Our system configuration methods, including the tools and equipment used, are standardised at every Swagelok authorised sales and service centre so you receive the same build, craftsmanship and technical expertise for your solution anywhere in the world. A Swagelok® Custom Solution enables you to minimise time and resources spent on production; helping you remain agile during market up and down turns.

Samples of our solutions for alternative fuels include:

Fuel Line Integration CNG Priority Panels Dispensing Systems
Heavy Duty Refueling Boxes CNC Tube Bending

#### **Limited Lifetime Warranty**

Swagelok and its authorised distributors warrant to the purchaser of their Products that the non-electrical components shall be free from defects in material and workmanship for the life of the Products. All electrical components installed in or on the Product are warranted to be free from defects in material and workmanship for twelve months from the date of purchase.

Complete warranty details are available on request.

## Installation

#### **Certified Installation Training**

Our extensive network of trainers can provide you, your associates, installers, and maintenance vendors with a wide range of training to minimise installation and maintenance errors and ensure your system maintains its reliability. Course completion is quick and on-site at any of our authorised sales and service centres around the globe. Our training programs include:

- Tube Fitting Installation Essentials
- Tube Fitting Inspection Essentials
- Tube Bending Essentials
- Hose Essentials

#### Local and Global Technical Support

Swagelok offers local technical expertise backed by an international support network to ensure the right product is selected and delivered at the right time.

#### **Onsite Support**

Swagelok representatives will be available to offer their product knowledge and solutions to your specific needs. Life cycle cost analysis is considered essential when choosing system components, Swagelok products are proven to met this challenge.

For more complex challenges we have access to factory trained Field Engineers who are intimately familiar with fluid system applications in the most demanding commercial industries.

## Installation

#### Tool Loaner Program

Not only do we sell benders, cutters, and hydraulic swaging units, we have on-site rentals available to suit our customers needs. Complete welding units are available, as well as hand benders, bench top benders and hydraulic swaging units for all sizes.

#### **Energy Audits**

Improve the performance of your fuel station or vehicle with energy audits, and training by our authorised sales and service centres. Leakage costs the industry a significant amount of money each year. The performance of any system carrying a gaseous or liquid medium is often difficult to guarantee. We are prepared to offer you the manpower and resources to help you investigate the leakage in your system and add money to your bottom line by reducing inefficiencies due to leaks.

# Regulators

RHPS SERIES & K SERIES
PRESSURE REGULATORS

The RHPS Series & K Series regulators can withstand pressures up to 10 150 psig (700 bar) and come in spring-, dome-, and air-loaded varieties. Both series are suitable for most gases and liquids, including aggressive fluids.



## **Ball Valves**

#### Alternative Fuel service (AFS) Ball Valves

Our AFS ball valve is designed with patented seat-loading technology that provides leak-tight integrity in both low- and high pressure systems. The valve's ultra-low-temperature fluorocarbon material provides sealing capability over the full temperature range and working pressures up to 6000 psig (413 bar).

#### 83 Series High pressure Ball Valves

Built for compact, maximum flow-through for two-way and three-way service, the ball valve's spring-loaded seats provide leak-tight integrity in both low- and high-pressure systems with working pressures up to 6000 psig (413 bar). The trunnion-style ball and bottom-loaded stem prevent blowout and enhance system safety.

#### SK Series Multipurpose Ball Valves

Swagelok SK series ball valves offer low-torque, quarter-turn operation in a compact design, providing positive shutoff in applications up to 6000 psig (413 bar).







## Check & Relief Valves

#### CH Series Check Valves

With fixed cracking pressures up to 6000 psig (413 bar) the CH series check valve offers a leak-tight solution with a variety of end connections in 316 stainless steel

#### PRV Series Proportional Safety Relief Valves

Made for gas and liquid service, our PRV series proportional safety relief valves are designed for easy set adjustment from 145 to 5800 psig (10.0 to 400 bar) in an all 316 stainless steel construction.





# Pressure Gauges

#### Stainless Steel Industrial Pressure Gauges

Our gauges provide accurate pressure measurement for industrial applications. They are offered in a wide range of pressure ranges, dial sizes, connections, mountings, and options to support your requirements.





## **Filters**

#### TF Series Tee-type Filters

TF series filters are available in a range of filter sizes with a choice of sintered and strainer elements—replaceable without removing the body from the system. TF series filters are suitable for applications with pressures up to 6 000 psig (413 bar).



# **Fittings**

#### Swagelok® Tube Fitting

The Swagelok tube fitting offers a reliable connection, fast installation with no special tools required, and consistent component geometry for uniform, repeatable performance. Extra advantages include a robust tube grip, leak-tight gas seal, excellent vibration resistance and easy assembly by hand for fast assembly and re-make.

#### **Jacketed Tube Connector**

A companion piece to Swagelok jacketed tubing, the Swagelok jacketed tube connector is designed to connect jacketed tubing systems while protecting tubing from external degradation in corrosive environments. The jacketed tube connector's patent-pending design combines proven tube fitting technology with an O-ring seal and an innovative, environmental jacket seal nut, providing a leak-tight seal on the stainless steel core of the jacketed tubing and a water-tight seal on the outer diameter of the jacketed tubing.



## Hoses

Each hose is assembled with your choice of Swagelok® tube fitting end connections. Available in single, twin or vent styles, and suitable for light and heavy duty applications, our TC series hose offers low pressure conveyance while our 8R series hose is suitable for low- and high-pressure on-vehicle applications. For additional on-vehicle and dispensing infrastructure applications, our NG series hose is designed to meet the demands of on vehicle fuel system applications.





# **Tubing**

#### **Metal Tubing**

We understand that your applications are nuanced and may need more than a one-size-fits-all solution, which is why we offer an extensive array of fractional and metric tubing. We have a wide range of surface finishes, materials, diameters, and wall thickness to suit your individual needs.

#### Multijacketed Tubing

Swagelok multijacketed tubing provides protection against galvanic and atmospheric corrosion and protects the tubing against wear and abrasion. In addition, it reduces costs by enabling installation of up to four tubes at once.

## Tools & Accessories

#### Welding System M200 Power Supply

Our award-winning welding system M200 power supply enables more accurate and efficient orbital welds. The M200 features an easy-to-use, high-resolution, 30.7 cm (12.1 in.) colour industrial touchscreen which enables users to choose from multiple weld programs. The system also includes automatic shield gas control and multilanguage capability, as well as universal voltage input from 100-230 volts.



## Tools & Accessories

#### High-Volume Swaging Unit

Designed to increase safety and productivity, the high volume swaging unit enables installers to easily preswage Swagelok nut-ferrule sets onto stainless steel tubing to keep up with rigorous production demands. The pneumatically driven and electronically controlled semiautomatic unit uses sensors to start and stop the process for consistent preswaging results.

#### Accessories

High-quality systems and components need high-quality tooling accessories to get the job done efficiently, accurately and safely. Our line of accessories is designed with optimal performance in mind so your installation and maintenance operations go smoothly, saving you time, money and resources in the long run.

Our accessories include:

- Tube Benders
- Tube Preparation Tools
- Tube Support Systems



