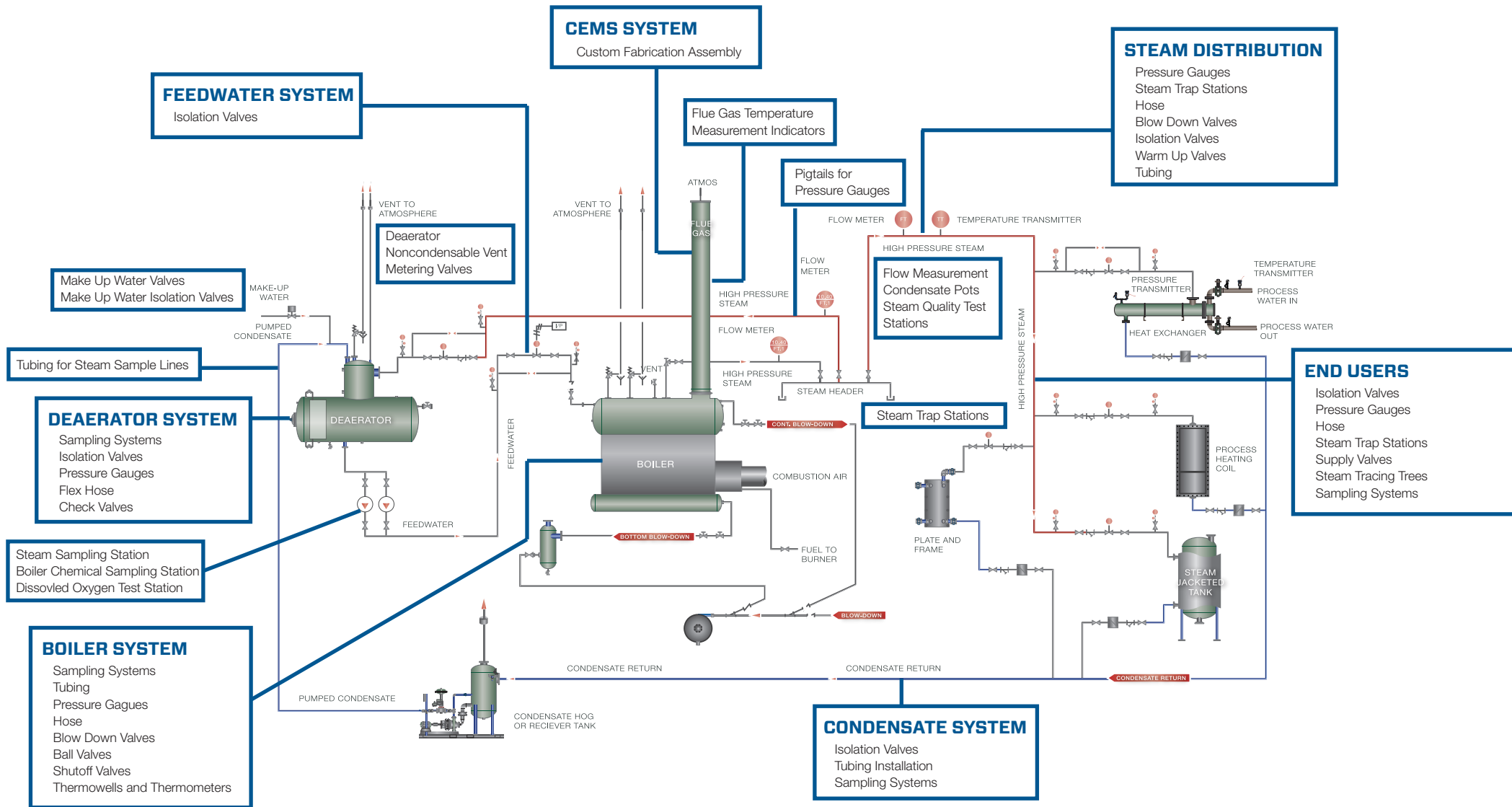


# Swagelok Steam Solutions

Reduce Energy Losses. Ensure Safe Steam Systems.  
Improve Reliability and Downtime.

# Your Trusted Resource for Optimizing Steam System Performance







## Ball Valves

**Pressure:** rated to 3000 psi  
**Temperature:** -20 to 450°F

Proven and tested 60 series ball valves provide safe, reliable steam isolation.

- Steam Trap Isolation Valve
- Warm Up Valve
- Start-up Vents and Drains

*FCI 70-2 Class VI Specification  
 API 641 Tests for Fugitive Emissions*



## Steam Ball Valves

**Pressure:** rated to 2500 psi  
**Temperature:** -20 to 600°F

Steam ball valves provide a packing option rated to 1050 psi with saturated steam at 550°F.

- Process Isolation
- Steam Trap Isolation Valve
- Warm Up Valve
- Start-up Vents and Drains

*FCI 70-2 Class VI Specification  
 API 641 Tests for Fugitive Emissions*



## Needle Valves

**Pressure:** rated to 10000 psi  
**Temperature:** -65 to 1200°F

N and HN series flow control severe service needle valves provide precise steam control.

- Blowdown Isolation
- Sampling Systems
- Instrument Isolation
- Instrument Root Valve



## High Temp Bleed Valves

**Pressure:** rated to 10000 psi  
**Temperature:** up to 850°F

Swagelok bleed valves provide precise venting of instrumentation lines for calibration.

- Vent Transmitter Lines
- Multi-valve Manifolds
- Gauge Pigtailed



## Blowdown Valves

**Pressure:** rated to 6000 psi  
**Temperature:** -65 to 1200°F

The 6DB valve is available with Grafoil packing for high-temperature performance and a variety of end connections.

- Instrument Isolation
- Blowdown Isolation



## C and CH Check Valves

**Pressure:** rated to 6000 psi  
**Temperature:** -10 to 400°F

Swagelok check valves offer excellent shutoff capabilities to prevent backflow in steam system applications.

- Drip Pockets
- Condensate Return Systems



## 50 Series Check Valves

**Pressure:** rated to 6000 psi  
**Temperature:** -65 to 900°F

50 series check valves offer the same benefits of the C and CH series check valves with all metal containment of the media and no springs or elastomers.

- Drip Pockets
- Condensate Return Systems



## Tube and Pipe Fittings

**Pressure:** rated to 10,200 psi  
**Temperature:** up to 1100°F

Connect process steam lines without threaded connections using Swagelok fitting products.

- Process Steam Supply Lines
- Condensate Return Lines
- Steam Trap Installations
- Instrument Impulse Lines

*Meets ASME B31.1 and B31.3*





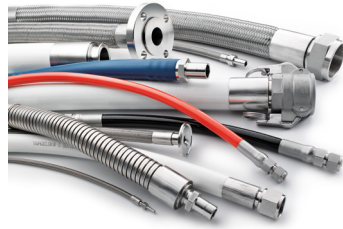
## Tube to Pipe Flange Conversions

**Pressure:** class dependent  
**Temperature:** -20 to 1000°F

Swagelok's flange design offers a thread free, weld free transition from flanged piping systems to tubing systems with a one-piece integrally machined forged body.

- Process Steam Supply Lines
- Condensate Return Lines
- Tracer Trees

*Flange types meet ASME, DN, EN, and JIS standards*



## Fluoropolymer Hoses

**Pressure:** rated to 3500 psi  
**Temperature:** -65 to 450°F

Available in sizes up to 2 in., fluoropolymer hoses come with a standard silicone insulating jacket.

- Steam Tracing Jumpers
- Press Applications
- Expansion Joints
- Wash Down Lines

*Meets ASME B31.1 and B31.3*



## All Metal Hoses

**Pressure:** rated to 6000 psi  
**Temperature:** -35 to 1000°F

All metal hoses offer welded end connections in accordance with ASME Boiler and Pressure Vessel Code Section IX.

- Steam Tracing Jumpers
- Press Applications
- Expansion Joints
- Wash Down Lines

*Meets ASME B31.1 and B31.3*



## Tubing Solutions

**Pressure:** rated to 10,200 psi  
**Temperature:** up to 1000°F

Tubing is a safe, reliable steam piping solution requiring fewer overall connections for a safer and simpler installation.

- Process Steam Supply Lines
- Condensate Return Lines
- Steam Trap Installation
- Instrument Impulse Lines

*Meets ASME B31.1 and B31.3*



## Jacketed and Insulated Tubing

**Pressure:** up to 5100 psi  
**Temperature:** up to 400°F

Thermoplastic polyurethane and PVC jackets protect tubing from external corrosion and abrasion. Fibrous glass insulation reduces heat loss to protect personnel.

- Transmitter Impulse Lines
- Sampling Systems



## Coiled Tubing

**Pressure:** rated to 10,200 psi  
**Temperature:** up to 1000°F

Coiled tubing allows for long, continuous length installations without having to use union connections. Available in 1/4 to 1/2 in. OD tubing.

- Steam Siphons
- Heating Coils
- Condensing Coils



## PFA Tubing

**Pressure:** rated to 275 psi  
**Temperature:** up to 400°F

PFA tubing provides chemically resistant, translucent connections.

- Chemical Feed System
- Sight Tube



## Tubing Supports

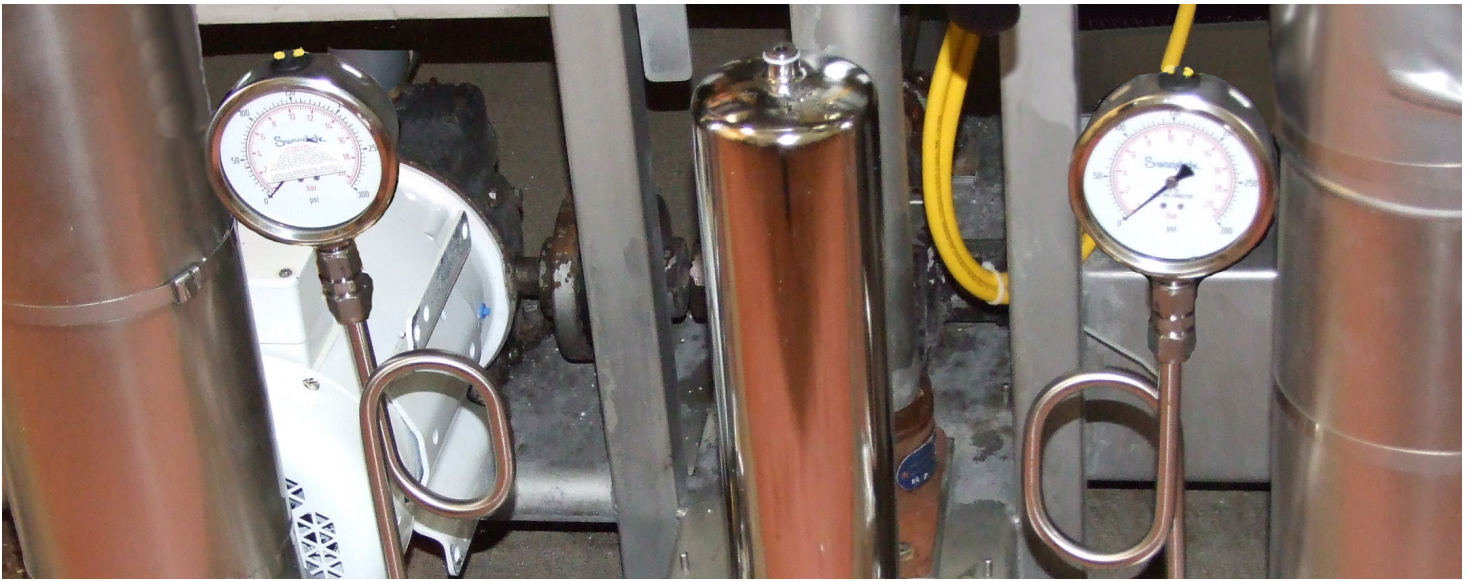
**Pressure:** rated to 1500 psi  
**Temperature:** up to 500°F

Swagelok tubing supports with aluminum cushions are used in higher heat applications up to 500°F.

- Tubing System





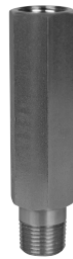


### Pressure Gauges

**Pressure:** up to 15,000 psi  
**Temperature:** to 392°F

Swagelok offers a wide range of pressure gauges including thermoplastic and all stainless steel meeting ASME B40.100 construction standards.

- Boiler Feed Water
- Deaerator Tank
- Distribution System
- Condensate Return



### Mini-Siphon

**Pressure:** rated to 6000 psi  
**Temperature:** -35 to 1000°F

Mini-siphons replace the traditional pigtail coil siphon and have a thermal barrier to protect the gauge from harmful steam, hot vapors and liquids.

- Boiler Feed Water
- Deaerator Tank
- Distribution System
- Condensate Return



### Pigtail Siphon Assembly

**Pressure:** rated to 2500 psi  
**Temperature:** -20 to 600°F

A pigtail siphon assembly provides ease of maintenance to extend the service life and accuracy of the pressure gauge when used in steam service.

- Boiler Feed Water
- Deaerator Tank
- Distribution System
- Condensate Return



### Steam Coil (Pigtail)

**Pressure:** 250 psi to 8205 psi  
**Temperature:** up to 750°F

Pressure gauge pigtails protect the pressure gauge from high temperature steam and reduce the effect of rapid pressure surges.

- Boiler Feed Water
- Deaerator Tank
- Distribution System
- Condensate Return



### Thread Sealants and Lubricants

**Pressure:** rated to 10000 psi  
**Temperature:** up to 1500°F

Silver Goop is an oil-based thread lubricant for use on stainless steel and high temperature alloys to prevent galling.

- Distribution System
- Condensate Return

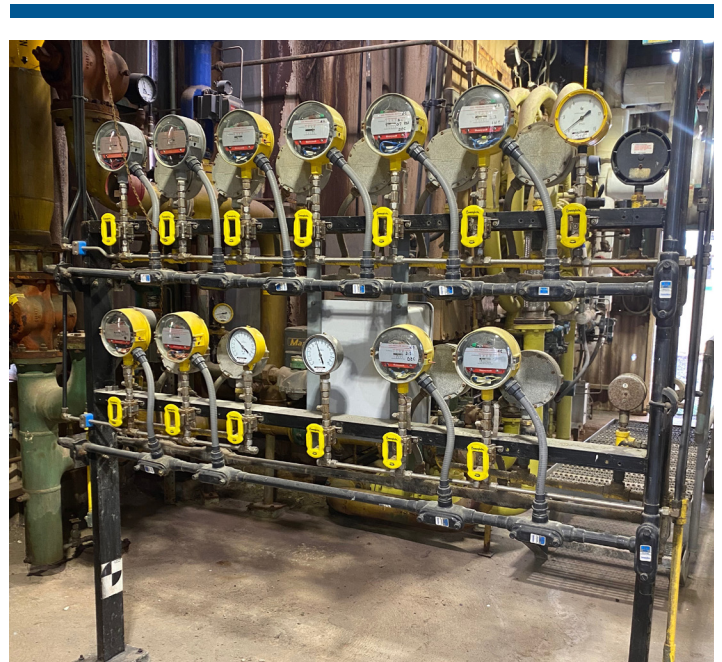


### Thermometers and Thermowells

**Pressure:** connection dependant  
**Temperature:** -100 to 1000°F

These products are used to measure steam and condensate process line temperatures.

- Boiler Feed Water
- Deaerator Tank
- Distribution System
- Condensate Return
- Heat Exchangers







### Manifolds

**Pressure:** up to 6000 psi  
**Temperature:** -65 to 1200°F

Swagelok manifolds are available in two, three, and five way valve configurations.

- DP Cells
- Digital Temperature Locations

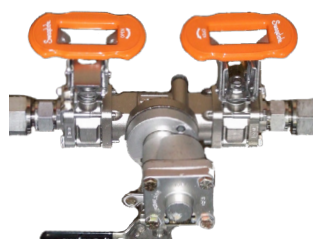


### Distribution Manifold

**Pressure:** up to 6000 psi  
**Temperature:** up to 850°F

Distribution manifolds are a configurable system with fewer potential leak points. Available with four to 18 needle valves and outlet connections.

- Tracer Supply System



### TVA Steam Trap Test Assembly

**Pressure:** up to 250 psi  
**Temperature:** up to 417°F

Swagelok TVA Universal Steam Trap Stations allow the user to standardize quality products, footprint of installation and provide visual indication of trap performance.

- Steam Trap Test Stations



### Fluid Distribution Header

**Pressure:** up to 3000 psi  
**Temperature:** -10 to 400°F

Swagelok fluid distribution headers are configurable with two to 16 branch outlets with or without valves.

- Tracer Supply System
- Condensate Return System
- Steam Distribution System

## Custom Fabrication and Assembly:

*Through this highly configurable service, Swagelok can fabricate steam system subcomponents for superheated or saturated steam systems.*



### Steam Trap Tree

Tracing trees utilize fluid distribution headers to bring all tracer legs to a common condensate header and trap maintenance location with an all stainless steel construction and small footprint.

- Tracer Supply System

### Custom Steam Trap Assembly



### Sample Cooler Systems

Swagelok can provide customizable steam sampling panels, to full continuous analytical monitoring systems for precise control. These systems are commonly used to effectively monitor concentration of Total Dissolved Solids in boiler feed and return water as well as conductivity, pH, and chemical concentrations in other process lines.

- Steam Sampling

# Support Services

## Training and Education

Swagelok offers a variety of training and education programs to help enhance your team's fluid system expertise.

### Courses Offered:

#### Swagelok Essentials Training

- Tube Fitting Installation and Inspection
- Hand Tube Bending
- Hose
- Valves
- Regulators
- Medium/High Pressure Cone and Thread

#### Steam Services Training

#### Steam System Training

#### Steam System Training for Specific Industries



## Evaluation and Advisory Services

Inefficiencies and downtime could be costing your plant more than you realize. Knowing where to look and what to look for is key in protecting against inaccuracy and inefficiency.

Our experienced team will visit your facility, evaluate your systems, and advise on enhancements that will improve your operations. At the end, we'll deliver a detailed report and recommend solutions tailored to your toughest fluid system applications and challenges.

### Available System Evaluations:

Compressed Gas Leak Detection

Hose Advisory Services

Steam System Physical

Fluid System Evaluation and Advisory

Sampling System Evaluation



**Let Swagelok be your resource for enhancing the performance of your steam applications. Contact one of our offices today to get started.**



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