



## Steam Control Products

*Building on a Strong Tradition of Excellence Since 1916*

**CONDENSATE UNITS**



**BOILER FEED UNITS**



**PUMPS**



**TEMPERATURE CONTROL VALVES**



**TRAPS, STRAINERS & VALVES**



**CUSTOM BUILT**



Sterlco® Steam Control Products  
2900 S 160th Street  
New Berlin, WI 53151

262-641-3808  
steam@acscorporate.com  
SterlcoSteam.com

# Steam Control Systems

**Partnering with Sterlco®** means, trust, quality, experience, and the brand customers have chosen for over 100 years for their steam systems. *Our quality products are second to none.*

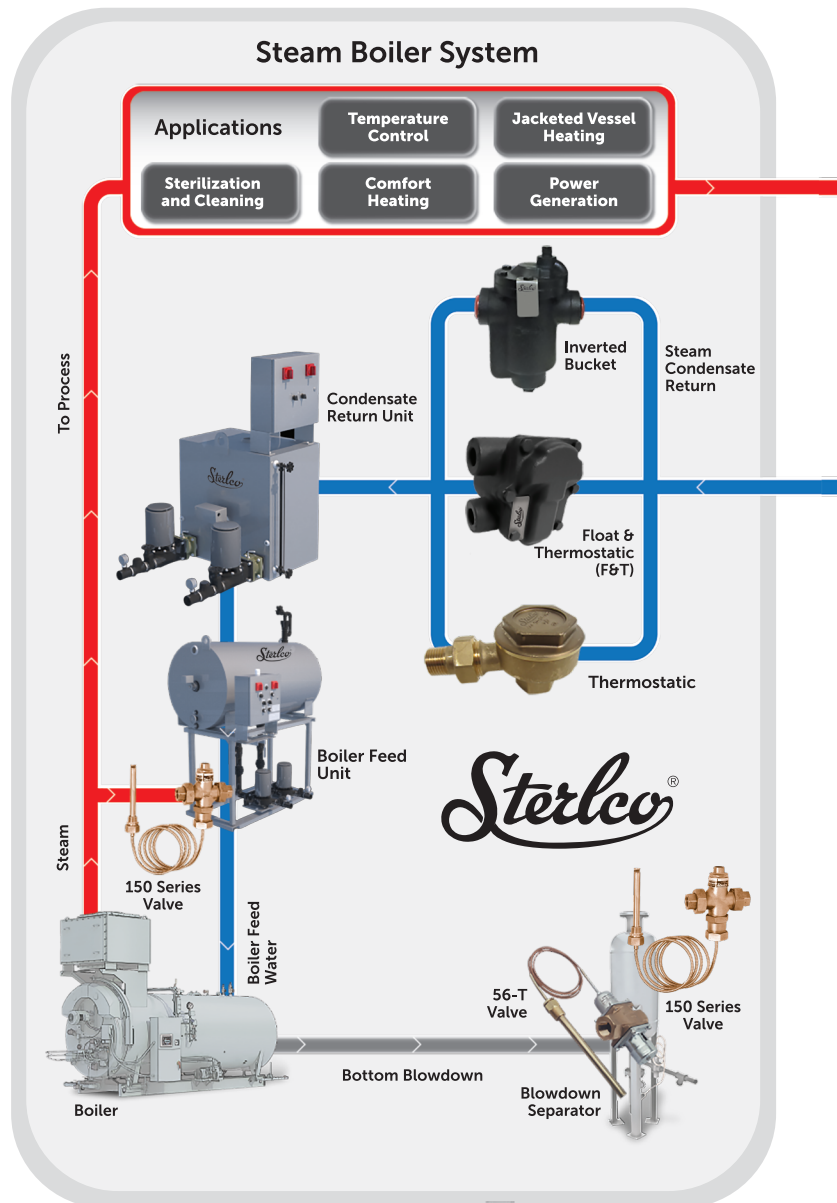
From sterilization and precise temperature control to comfort heating and power generation, we offer a variety of steam control products to keep your system running efficiently.

## How Does a Steam System Work?

Steam is generated inside the boiler by heating treated condensate, above 212°F. The steam is then transported through pipes to the point of use, driving the heating process created by the steam. When the steam cools down and converts to condensate, it flows into the condensate unit, and eventually into the boiler feed unit. The boiler feed unit sends make-up water to the boiler as needed.

“Sterling Steam Control Products are built to last, designed to be competitive and they have a stellar staff!”

-Ray C. 30 Year Sterlco Representative



# Choosing Your Pumps

**Centrifugal Pumps** are the main component of any boiler feed or condensate unit and are essential to keep your steam system running efficiently. Sterlco® Pumps deliver condensate at proper flow rates for maximum steam control system performance. The pumps are made from high quality parts and engineered to ensure long life and peak efficiency. Maintenance is made easy with a motor and impeller removable without disturbing piping connections and easy to replace seals. If you need to replace a pump on an older boiler feed or condensate unit, Sterlco® offers pump adapter kits to easily mount to the bolt patterns of other manufacturer's units in the field.

Open drip proof motors come standard, but Sterlco® offers specialty motors if your application requires it. Options include: Totally Enclosed, Fan Cooled (TEFC), washdown duty, & explosion- proof. Contact Sterlco® to discuss your unique application needs.

**Built to Last:** Heavy-duty cast iron housing and bracket to assure rigidity and long life

**Easy to Maintain:** Motor, bracket, & impeller assembly can be removed for service without disturbing discharge piping

**Maximum Performance:** Maximum capacity achieved with lower amp draw



**G Series Pump**



**K Series 2' NPSH Pump**



**J Series Pump**

	G-SERIES	J-SERIES	K-SERIES
Flow Rate (GPM)	3 to 30	3 to 75	3 to 85
Pressure (PSI)	20	20 to 50	20 to 50
Discharge Size	3/4"	1-1/2"	1-1/2"
Mechanical Seal	250°F	250°F	300°F
Maximum Condensate Temp	200°F	200°F	212°F
Pump Size	1/3, 1/2, & 3/4 HP	1/2 to 3 HP	1/2 to 3 HP
Voltages	Single Phase - 115, 208, 230 Three Phase - 208, 230, 460, 575		
RPM (Standard)	3450		



# Boiler Feed & Condensate Tank Options

**Boiler Feed & Condensate Tanks** are extremely reliable and known for their long operating life in the field. Each tank is heavy-duty for secure pump attachment and is offered in steel, cast iron, and stainless steel. If required, the tank thickness meets military specifications. Units come with a wide range of standard and optional features.

Applications requiring up to 212°F or vertical multi-stage applications utilize an elevated tank system design. If space is limited, low profile tanks are available to fit within your plant's designed footprint.

Sterlco provides the highest quality engineered systems designed around your application. Contact the dedicated engineering staff to customize a tank to fit your unique application requirements.

Feature Availability	Boiler Feed	Condensate Units
Alternator for Duplex Units	Electric	Mechanical & Electric
Dial Thermometer	Optional	Optional
Gauge Glass	Standard	Optional
Isolation Valves (Optional)	Brass or Stainless Steel	
Discharge Pressure Gauges	Optional	Optional
Solenoid operated make-up water valve with reverse acting float switch	Optional	N/A
Elevated Tanks Operating Up to 212°F	Optional	Optional
Low Profile Tanks with Four Mounting Brackets	Standard with K Pump, Optional with G & J	



4200 Series Boiler Feed Unit



Cast Iron Condensate Unit

Elevated Cast Iron Condensate Unit



	STEEL	CAST IRON	STAINLESS-STEEL
Tank Size -Capacity (Gallons)	8 - 714*	6 - 120	8 - 714*
Pump Quantity	Simplex & Duplex**		
Environment	Dry	Dry	Wet - Humid
Cost	\$	\$\$	\$\$\$

\* Large customizable tank sizes available upon request

\*\* Additional pumps available on custom units



# Custom Built Units

While Sterlco offers a full lineup of standard boiler feed and condensate units, the ability to customize is something that Sterlco specializes in every day. If your system needs unique tanks, pumps, or control panels, our experienced engineers can design the perfect boiler feed or condensate package to fit your application's unique requirements.



**Stainless Steel Condensate Unit**

Stainless Steel & watertight components designed for washdown duty in the Food, Beverage, & Pharmaceutical Industries



**Elevated Steel Boiler Feed Unit**

- Quadruplex Boiler Feed Unit & Control Panel
- Solenoid operated make-up water valve with three valve by-pass
- Main disconnect for system shutdown

“The Sterlco design team put together a complete submittal on two different and difficult, custom boiler feed units for United Airlines. Sterlco has greatly helped us gain a great customer on this project and the fast turn around times have also earned sales with other customers.”

-Edward L. Sales Representative

## Control Panel

Sterlco control panels are available for boiler feed and condensate units with multiple standard and optional features. Indoor units protect against foreign objects, settling dust and drips. Upgrades are available for outdoor use, increased water resistance and corrosion protection. If your control panel requires more features, Sterlco can design a solution that meets your needs, budget, & timeline.



### Standard Features:

- Motor Circuit Protector
- Hand-Off-Auto Selector Switch
- External Reset
- Control Circuit Transformer
- Pump Running Pilot Light
- Removable Mounting Plate & Terminal Strip
- NEMA 12 Enclosure
- Mounted & Wired with Single Point Power Connection

### Options:

- Electric Alternator
- Low & High Level Alarms
- Pump Fail Alarm
- Pump Test Push Button
- Lead/Lag Selector Switch
- Pump Run Time Meter
- Main Disconnect
- Pump Fail Transfer
- Low Water Cut Off
- Power On Pilot Light
- Pump Run Verification
- U.L. Certification
- NEMA 3R Exterior Snow & Ice Resistant
- NEMA 4 Washdown Duty
- NEMA 4X Corrosion Resistant Stainless Steel

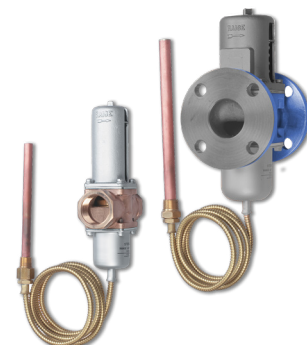
# Temperature Control Valves

Sterlco's Self-Modulating Temperature Control Valves are heavy-duty and designed to help maintain temperature, flow and pressure. The 56-T series lineup is designed for cooling applications while the 150 series lineup is designed for heating (D-150-G series) or cooling (R-150-G series) applications. All valves are self-modulating for continuous & accurate control. Installation is made easy with the ability to mount in any position and minimal maintenance is necessary.

	56-T SERIES	150-D	150-R
Temperature Range	7 Offerings from 40° to 275° F (4° - 135° C)	40 Offerings from 10° to 300° F (-12° - 149° C)	
Connection Sizes	3/8" - 1 1/2" NPT 2" and 2 1/2" Flange	1/2", 3/4", 1" NPT	
Temperature Accuracy	± 3° F		
Mount In Any Position	Yes		
Heating	No	Yes	No
Cooling	Yes	No	Yes
Heavy Duty Construction	Brass Body	Brass Body & Unions	
Capillary Length	6' Standard 18" - 45' Optional Sizes		
Armored Capillaries	Optional	Standard	



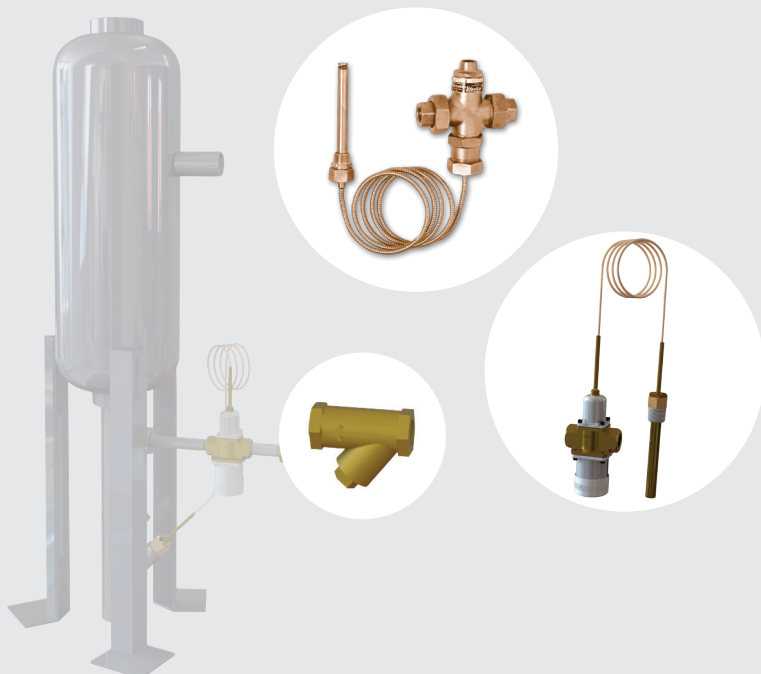
**150 Series**  
Temperature Control Valve



**56-T Series**  
Temperature Control Valve

## APPLICATION EXAMPLES

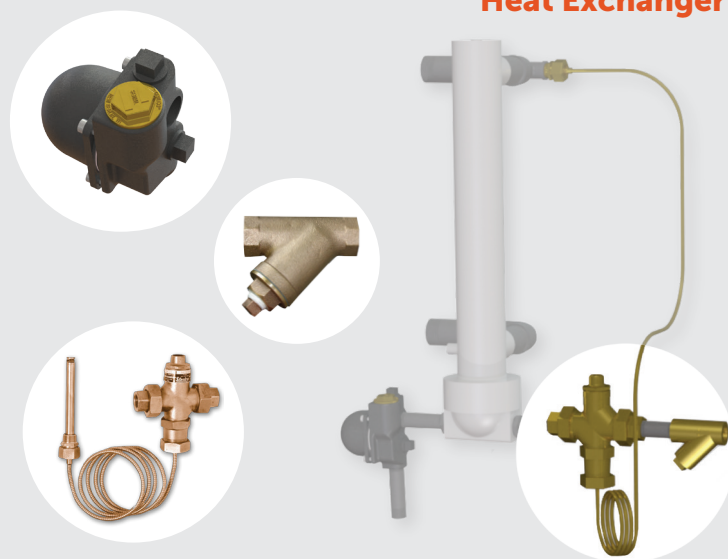
### Blowdown Separator



The 56-T or R-150-G Series will introduce cold water to the vessel to drop the condensate temperature to 140° F or less before allowing the condensate to discharge to drain.

A Strainer is installed upstream of the Temperature Control Valve to filter out any contaminants from the supply cold water to the separator.

### Heat Exchanger



#### Oil Cooling

Reverse cooling 150 series Temperature Control Valve regulates the temperature of the discharge condensate from the heat exchanger and tempers it to 140° F or less before discharging it to drain.

#### Steam to Water

Direct heating 150 Series Temperature Control Valve will introduce steam to the heat exchanger to heat the fluid in the tubes after which the condensed steam flows to the bottom of the heat exchanger and into a steam trap.

# Traps, Strainers & Radiator Valves

Sterlco offers an extensive lineup of steam traps designed for the most demanding applications. These rugged and long-lasting traps & strainers are engineered to operate at the highest efficiency levels.



## Float & Thermostatic Trap

- All Types of Steam Heating Systems and Steam Process Equipment
- Used for Unit Heaters, Space Heaters, Water Heaters, Pressing Machines, Mains and Risers and Other Similar Equipment
- Extremely Versatile Traps
- Works Efficiently with Both Light and Heavy Condensate Loads
- Size Can Be Compact or Robust
- Improves Operational Efficiency



## Low Pressure Radiator Trap

- Accurately and Efficiently Free Radiators of Air and Condensate Without Allowing Steam to Be Wasted into Returns
- Effective in Vacuum Heating Systems
- Long Service Life-Reduces Rust or Scale Entering the Trap from The Piping That Could Obstruct the Valve Opening
- Easy Maintenance
- Rugged Construction



## Inverted Bucket

- Designed for Extended Service & Low Maintenance with Medium and High-Pressure Steam
- Corrosion Resistant Stainless-Steel Internals
- Built to Withstand High Pressures
- Tolerates Dirty Steam
- Immediate Condensate Discharge at Saturated Steam Temperature
- Designed to Work with Blast Coils, Laundry Equipment, Hot Water Heaters, Steam Kettles and A Broad Range of Industrial and Process Applications



Brass



Cast Iron

## Brass & Cast Iron Y-Strainers

- Provides Protection for Equipment Controlling the Flow of Water, Steam or Gases for Trouble-Free Operation.
- 40-Mesh Stainless Steel Wire Screens on Brass And 20-Mesh or Perforated on Cast Iron
- Adaptable for Fluid Handling Operations in Commercial and Industrial HVAC, Food & Beverage, Pharmaceuticals, Hospitals, Schools, Power Utilities, Refineries and Petrochemical Applications.

## 518/523/511 Radiator Valves

- Positive "On" & "Off" Control for Any Type of Heating Element or Radiator
- Body Is Built of Heavy-Duty Brass
- Several Body Patterns Available
- Models: Packed Stem, Packless, & Spring Packed
- Durable & Easy to Install



*“Lean on our expertise to maximize your steam system capabilities. Sterlco - a name you can trust for over 100 years.”*

*-Dennis Pampel, 40+ Year Sterlco Team Leader*





In 1916, the company then known as the Sterling Engineering Company was established with a corporate mission of controlling heating temperature systems. Today, we design and manufacture boiler feed and condensate packages, valves, traps, strainers, and pumps for steam and hot water systems.

Partnering with Sterling means more than just getting Sterlco® system components. Today, we offer an extensive line of standard products and have in-house engineering that can design a custom package specific to your application. From sterilization and precise temperature control to comfort heating and power generation, Sterlco® offers a variety of steam control products to keep your system running efficiently.

Get more from your steam system with components that are easy to install, operate, and maintain. Backed by expert ACS Group support, you can count on a solution that will help you optimize uptime, efficiency, and productivity.

## Industries Served

Power  
Utilities



Refineries &  
Petrochemical



Food &  
Pharmaceuticals



Hospitals &  
Schools



Industrial  
Applications



Breweries, Distilleries  
and Oil Extraction



Mobile  
Steam Plants

