



# Condensate Return & Boiler Feed Water Skid Systems

Utilizing Electrically Powered Pumps

Manufactured for

**TLV**®

by a Certified,  
Independent  
Fabricator



## IDEALLY SUITED FOR

- Food & Beverage
- Fine Chemicals
- General Chemicals
- Hospitals
- Buildings
- University Campuses



## FULLY CUSTOMIZABLE

- Wide range of pump sizes, electrical motors, tank sizes, tank materials
- Extensive selection of ancillaries such as isolation valves, gauges, starter types, & level switches
- Suitable to a wide range of applications, loads & pressures
- Control panel options available for Guardian-Plus Condensate Return & Boiler Feed systems



## QUALITY ENGINEERING

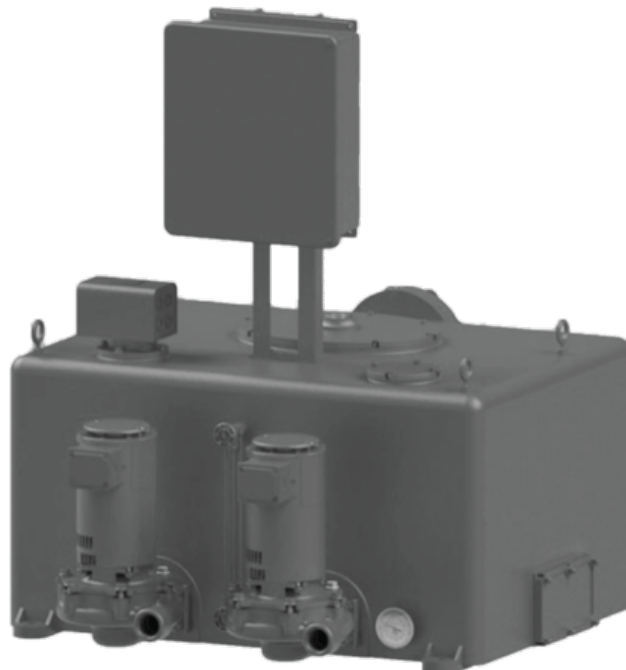
- Engineered solutions based on a consultative approach to application review and product selection
- Quality component engineering & assembly with a proven track record of years of industrial performance

# Condensate Return

Guardian and Guardian-Plus condensate return systems quickly collect and pump condensate back to the boiler feed unit. Pumping action is controlled by either float switch (simplex) or mechanical alternator (duplex) designs which energize the pump motor(s) when the liquid level reaches a set fill height.



## Guardian Condensate Return



## Guardian-Plus Condensate Return

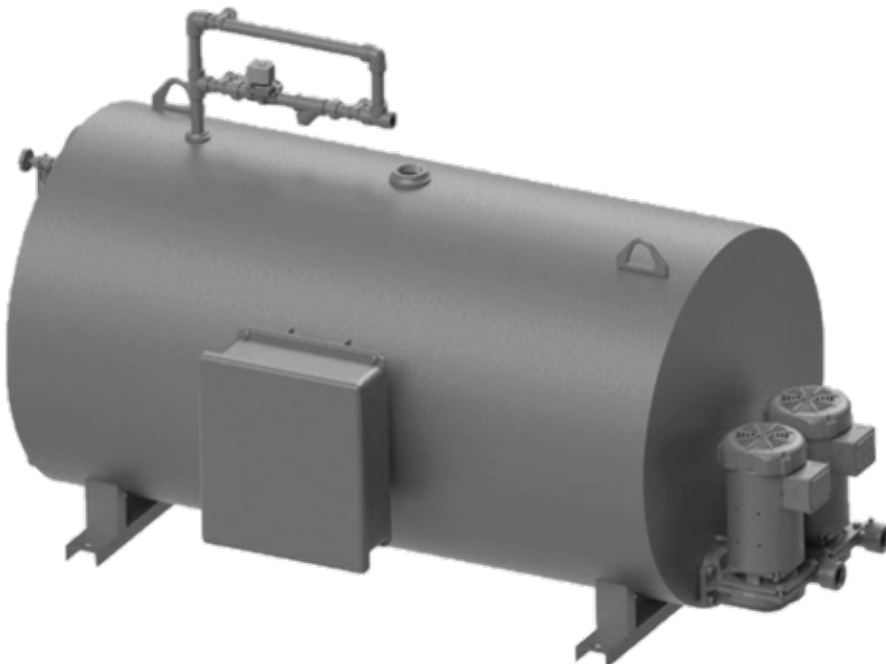
# Boiler Feed Pumps

Guardian and Guardian-Plus boiler feed pumps are used to pump condensate and makeup water directly into the boiler(s).

Pumping action is controlled by a boiler-mounted level controller that senses boiler water-level requirements. A float operated valve regulates the inflow of makeup water.



**Guardian Boiler Feed**



**Guardian-Plus Boiler Feed**



## TECHNICAL HIGHLIGHTS

- Space-saving mechanical configurations
- Mechanical seals able to withstand temperatures to 250°F
- Simple in-field hookup and easy low-maintenance service
- 1/3 to 10 hp motors available in various single & three phase configurations



## QUICK COST-EFFECTIVE DELIVERIES

- Short delivery times achieved by extensive stock & stable supply chain
- Cost competitive solutions provided for custom systems by using standard stock items



## OTHER PUMPING SOLUTIONS

- Vacuum Condensate Return & Boiler Feed solutions are also available
- TLV additionally offers non-electric condensate return solutions

See TLV's PowerTrap® series for product details and consult TLV for more information on skid solutions



# Summary of Specifications

## Guardian Range

Capacities up to 18 GPM

Discharge pressures up to 20 psig

Motors ranging from 1/3 hp to 5 hp available in 115, 208, or 230 single phase, 3,450 RPM

Receivers:

- Cast Iron Tank Based Systems: 6-gallon simplex to 21-gallon duplex
- Rectangular Steel Tank Base Systems: 10-gallon simplex to 20-gallon duplex
- Cylindrical Steel Tank Base Systems: 49-gallon to 117-gallon duplex

## Guardian-Plus Range

Capacities up to 150 GPM

Discharge Pressures up to 70 psig

Motors ranging from 1/3 hp to 10 hp available in 115, 208, or 230 single phase and 208, 230, or 460 three phase, 1,750 or 3,450 RPM

Receivers:

- Cast Iron rectangular receivers are available in 15 to 110-gallon capacities
- Heavy duty, welded carbon steel receivers are available in rectangular or cylindrical configurations with capacities from 21 to 110 gallons and 49 to 1000 gallons respectively