



# HYDRONIC SYSTEM CONTROL

Maximum System Performance for Condensing, Non-condensing  
or Hybrid Applications.

# TOTAL SYSTEM OPTIMIZATION TOTAL INTEGRATION

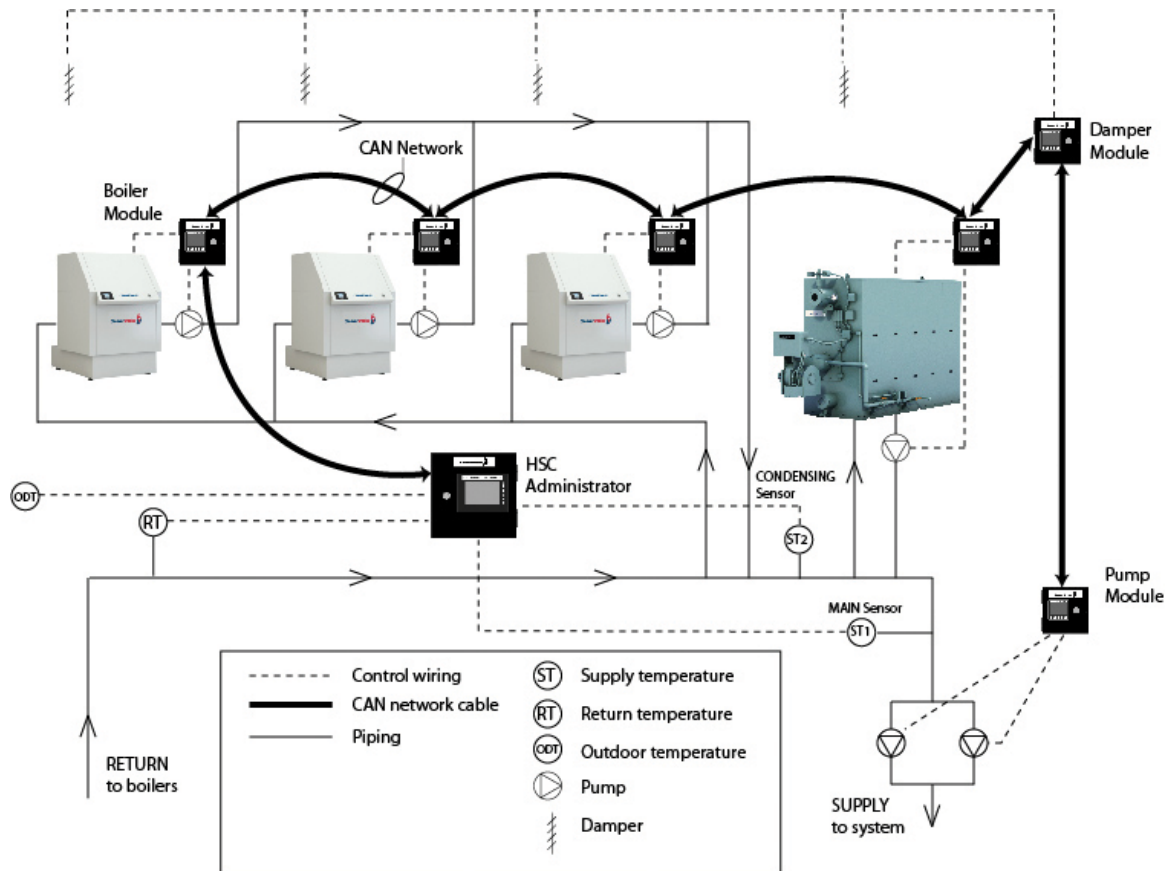
Cleaver-Brooks is the leading boiler room solutions provider. We fully design, engineer, manufacture and integrate boiler room products. So who better to design and engineer a hydronic system control than boiler engineers for maximum efficiency, safety and reliability.

The Hydronic System Control (HSC) is designed to deliver optimum control of hydronic systems with multiple hot water boilers of all types, as well as connected pumps, valves and dampers. The HSC is the ideal control for hot water systems with both condensing and non-condensing boilers, commonly referred to as a hybrid hydronic system.

The HSC delivers heated water reliably at a desired set point to a building heating system or similar process heating application. The HSC utilizes up to four temperature inputs to effectively coordinate multiple boiler types and sizes to maximize operational efficiency

The system consists of an Administrator managing a network of one or more satellite control modules utilizing the CANbus network architecture. Up to 20 boilers can be integrated into the HSC system. Remote auxiliary interface modules expand the control capabilities for modulating control of up to 8 system pumps as well as interlocking up to 24 damper/draft controls.

## A Typical Hydronic System



# The only control that truly optimizes the operational efficiency of all types of boilers in a hydronic system

The HSC controls boiler sequencing and firing rate based on boiler, system, and outdoor temperatures to maximize the efficiency of your heating plant.

## Flexible hydronic control

The HSC can efficiently manage both low temperature (condensing) and traditional (non-condensing) hydronic systems based on outside air temperature or varying zone temperatures. With integrated pump modulation control and boiler outlet temperature limiting, it delivers efficient and reliable heat during all seasons.

## The hybrid concept

The HSC is ideal for integrating condensing and non-condensing boilers in a single system to economically meet building heating requirements while protecting the non-condensing unit(s) from adverse affects due to improper flow and/or temperature.



### Features:

- Sequence and modulate up to 10 condensing and 10 non-condensing boilers

- Multiple loop PID set point control to maintain the system supply temperature and operate boilers at maximum efficiency

- Outdoor reset

- Locally enable up to 8 system pumps, 2 DHW pump/valves and 1 bypass valve

- Lead-lag-standby system pump control

- Variable Speed Control of boiler pumps and up to 8 system pumps

- Interlock dampers, draft controls, isolation valves

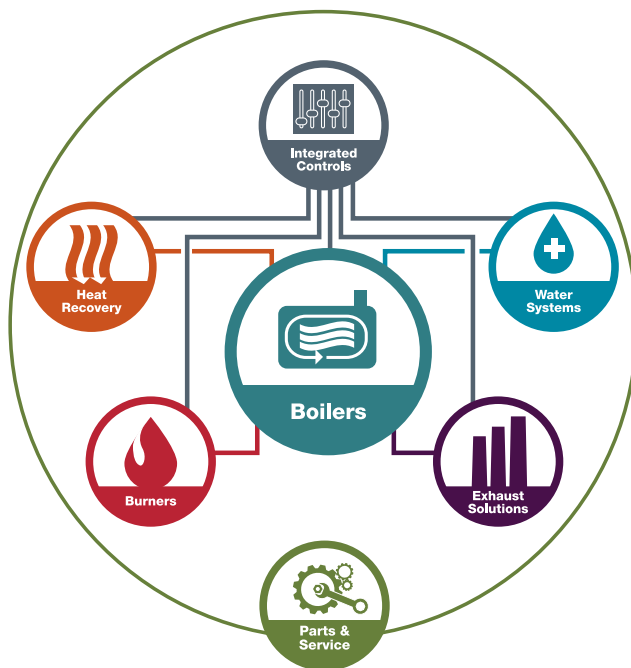
- Domestic hot water priority demand and pump /valve control

- Boiler outlet temperature limiting and alarm monitoring

- ModBus RTU communications for building EMS interface

- Alarm History

- Night setback



# Total integration doesn't stop with the boiler.

Efficiency and quality does not end with intelligent control systems. Cleaver-Brooks complete integration produces the most efficient boiler solutions in the world. Completely designed, engineered, manufactured, integrated and serviced by one company, our systems don't have a single outsourced component to jeopardize compatibility or performance. If you are looking for the best-quality boiler systems with the lowest emissions and highest efficiencies, you're looking for Cleaver-Brooks.



221 Law Street, Thomasville, GA 31792  
cleaverbrooks.com · info@cleaverbrooks.com  
414.359.0600 · 800.250.5883