

**Hot Water
Solutions for
Industry**



Armstrong®

Digital Control that is Faster, Simpler and Smarter



Emech™ is a multi-patented range of digital two and three-port rotary control valves that provide industry-leading temperature and flow control to your processes.



Water Mixing
Steam & Water Mixing
Flow Control

Together the Emech™ Valve, Sensor and Actuator provide unrivalled temperature and flow control performance:

- Better process controls for greater yield and less wastage
 - +/- 0.5°C temperature control on water mixer
 - +/- 1°C temperature control on steam mixer
- Process fluid is at temperature before it leaves the outlet port
- Lower utility and maintenance costs
- Reduced energy and water consumption
- Longer service life due to reduced mechanical wear and corrosion resistance, compared to traditional mixing and control valve systems
- Ceramic shear action seat technology (water valves only)
- Valve mounted super-fast temperature sensor

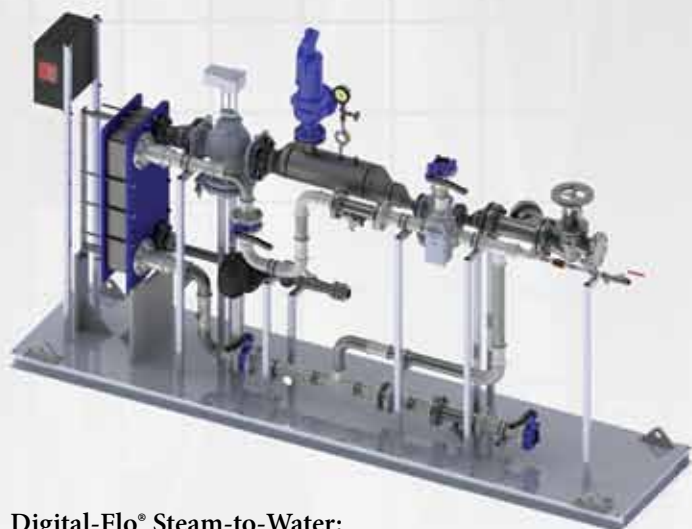
Emech™:

- 100% duty cycle rated actuator
- Planetary lifetime lubricated, low backlash gearbox
- High speed quarter-turn in 1.3 seconds
- Precise positioning achieves 0.03° valve seat placement
- Abrasion and corrosion resistant seats
- Electric actuator with integrated PID temperature controller



Hot Water Generation that is Smarter by Design

Armstrong blends revolutionary digital water temperature control technology with instantaneous heat exchanger design to deliver Digital-Flo®, an industry changing series of steam/water and water/water heaters.

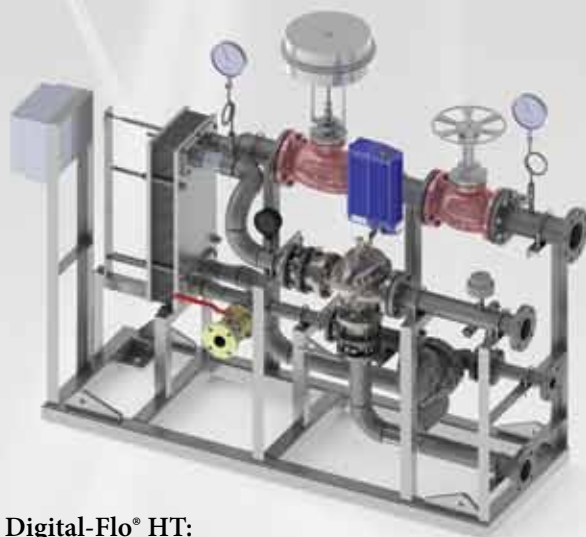


Digital-Flo® Steam-to-Water:

- Delivers blended hot water between 27 – 71 °C, at +/-1°C, even at very low flow
- Water is raised above 70°C, then blended down to the set point. This greatly reduces the risk of bacteria growth in the heat exchanger
- Constant steam pressure means no condensate pump is required
- Steam instantly shuts off in the event of a high temperature alarm, and The Brain® fails to the cold position
- Full range of steam accessories available
- Ideal for wash-down and general plant hot water

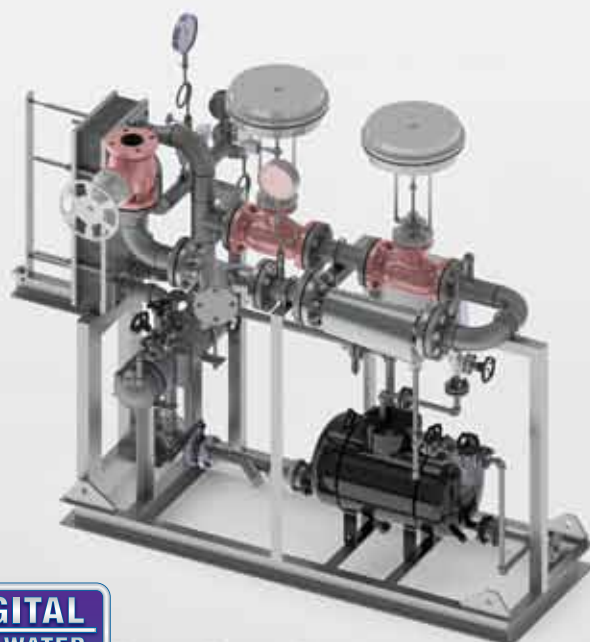
Flo-H₂O™:

- Steam-to-water closed-loop heating packages
- Water-to-water closed-loop heating packages
- Full range of accessories available



Digital-Flo® HT:

- Delivers blended hot water between 0 - 100 °C, at +/-0.5°C and higher for closed loop applications
- Water is overheated then blended back down, before delivering to the process. This eliminates bacteria growth in the heat exchanger
- Constant steam pressure means no condensate pump is required
- Steam is instantly shut-off in the event of a high temperature alarm
- Full range of steam accessories are available
- Ideal for process hot water and sterilization applications requiring a high degree of temperature control and reliability



Innovative Solutions for Safety and Simplicity



Armstrong can custom build packaged systems to meet your site-specific needs.

For example, this 4MW package was supplied to a power station, and was designed to utilize superheated steam directly into a shell & plate heat exchanger for heating water/glycol in a closed loop system.



Package included:

- Steam separator
- Temperature controls
- Condensate cooler and electric condensate pumping set
- Fully wired control panel
- Special paint specification for coastal outdoor use



STEAMIX® Hose Stations and Armstrong Hot and Cold Water Hose Stations are designed to improve efficiency and reduce risk when mixing steam and water for wash-down.

Steamix® Hose Stations

- Fails safe, will not pass live steam
- Tamper resistant locking device
- Rugged design with 2 year warranty
- Full range of accessories available



Hot & Cold Water Hose Stations

- +/- 1°C temperature control
- Set and lock to desired hot water temperature
- Can be set to operate between full cold and set-point

Dependable, Simple and 99.7% Efficient

Armstrong Flo-Direct® Complete Thermal Exchange Gas-Fired Water Heaters offer a complete range of high efficiency, compact, all-stainless steel water heaters that are suitable for a wide variety of hot-water applications.

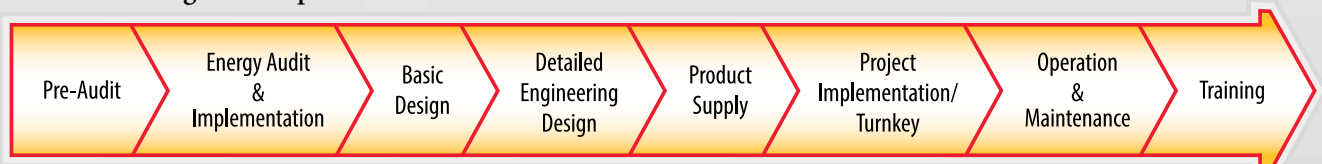
FLO DIRECT
Complete Thermal Exchange
Gas-Fired Water Heater



Armstrong Flo-Direct “Complete Thermal Exchange” Gas Fired Water Heater

- 99.7% efficient HHV the Flo-Direct utilises nearly all the energy available in the gas
- Fast return on investment
- Same efficiency at all demands
- Improved CO₂ emissions
- Lower maintenance
- No inspections under PED
- Does not scale
- Drinking water compliant
- 25 models available: 293kW – 7.3MW
- Suitable for use with natural gas or LPG
- No water treatment required
- 10-year warranty on body and internals
- 2-year warranty on all other components

How Armstrong Can Help You



Armstrong provides intelligent system solutions that improve utility performance, lower energy consumption, and reduce environmental emissions while providing an “enjoyable experience.”



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