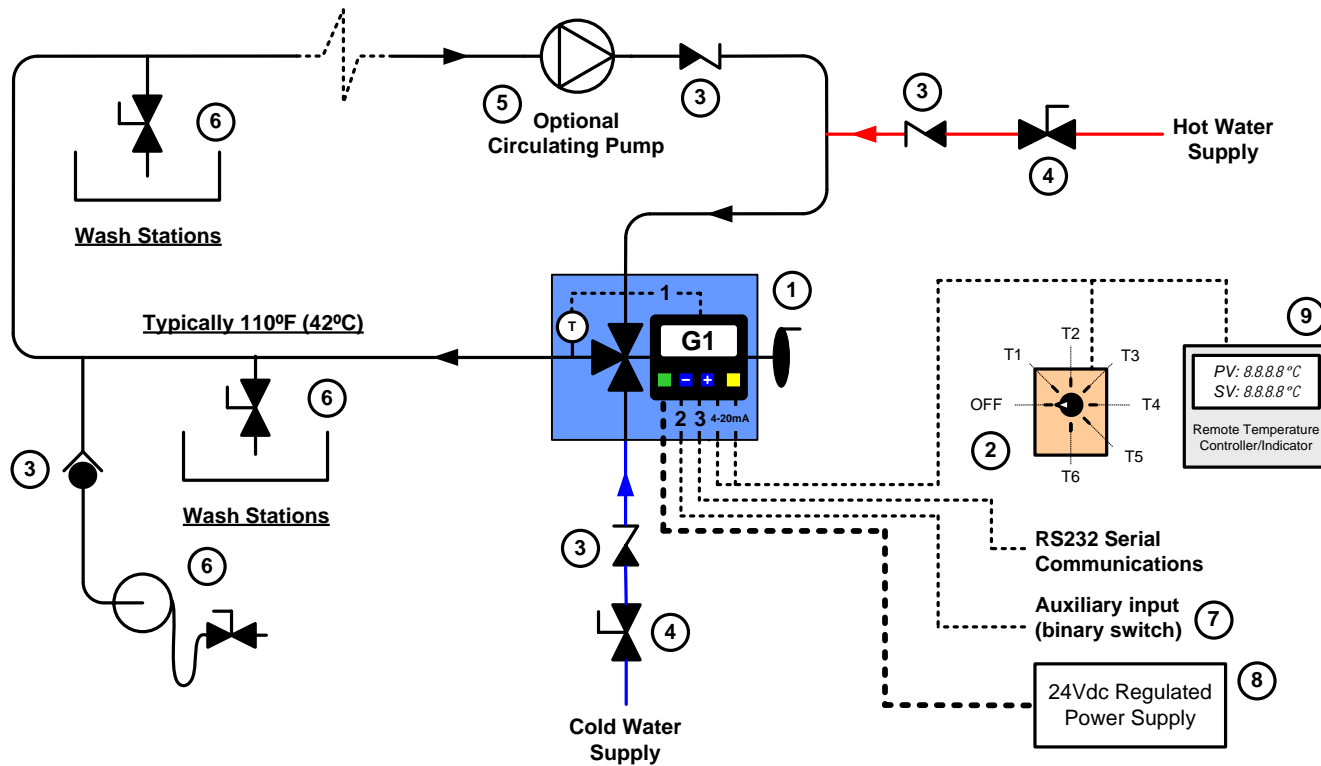


APPLICATION  
PROVEN IN  
INDUSTRY



## Advantages of the Emech Valve and Actuator

OUT OF THE BOX solution

Very high resolution capability (0.03° rotational)

①

Local closed loop control of temperature

High speed electronic actuator

IP65/Nema 4 electronics enclosure

High speed temperature sensor

Constructed of CF8M (316) stainless steel

Top entry allows inline access to internal valve parts

Durable corrosion resistant ceramic discs



**Figure 1:** The Emech temperature control solution consisting of the F3 mixing valve and G1 actuator with integrated temperature sensor.

## Application

To provide accurate and energy saving temperature control for a simple ring main circuit.

## Operation

The Emech valve and actuator accurately controls the temperature of the ring main fluid. Even with high demand or sudden changes of inlet pressure and temperature to the valve, the G1 controller aggressively minimises outlet temperature variations.

## Advantages

- High performance stand alone closed loop temperature control out of the box solution.
- Accurate to +/- 0.5°C (0.9°F) over a 0 – 100°C (32 - 212°F) control range.
- Minimized seal replacement requirements and plant down time.

## Key

- 1 Emech F3 + G1 Temperature Controller
- 2 Emech Temperature Selector Switch
- 3 Check Valve (non return)
- 4 Manual Isolation Valve
- 5 Circulating pump
- 6 Wash Station
- 7 Auxiliary Input e.g. Flow Switch
- 8 24Vdc Regulated Power Supply
- 9 Remote Digital Controllers (PV and SP display)

**Disclaimer:** This diagram is for general discussion purposes only. The information is solely intended to provide a general understanding of the subject matter and to assist Emech's customers and potential customers to assess whether they require further information.

Contact Emech for customized application sketches

**Note:** Proposal sketch for discussion purposes.

- Water pipe
- - - Steam pipe
- 24Vdc power cable
- ..... Signal cable

## Emech Control

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