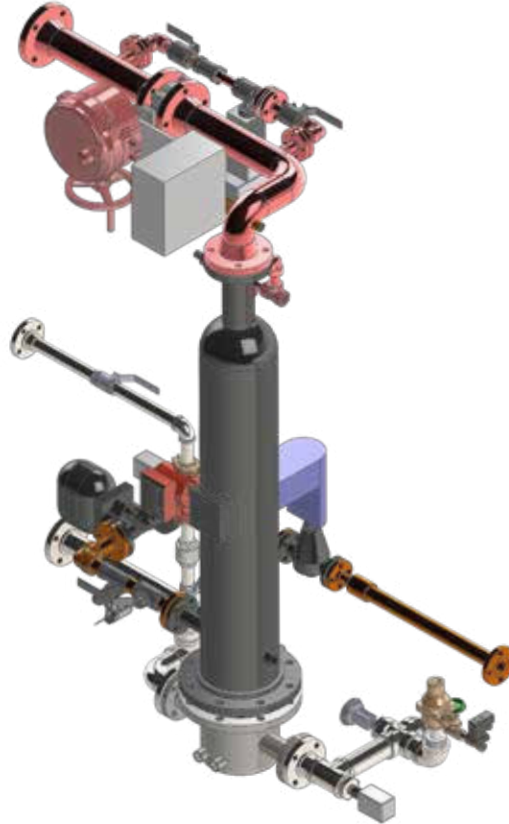# MCU – Simplex Feedback

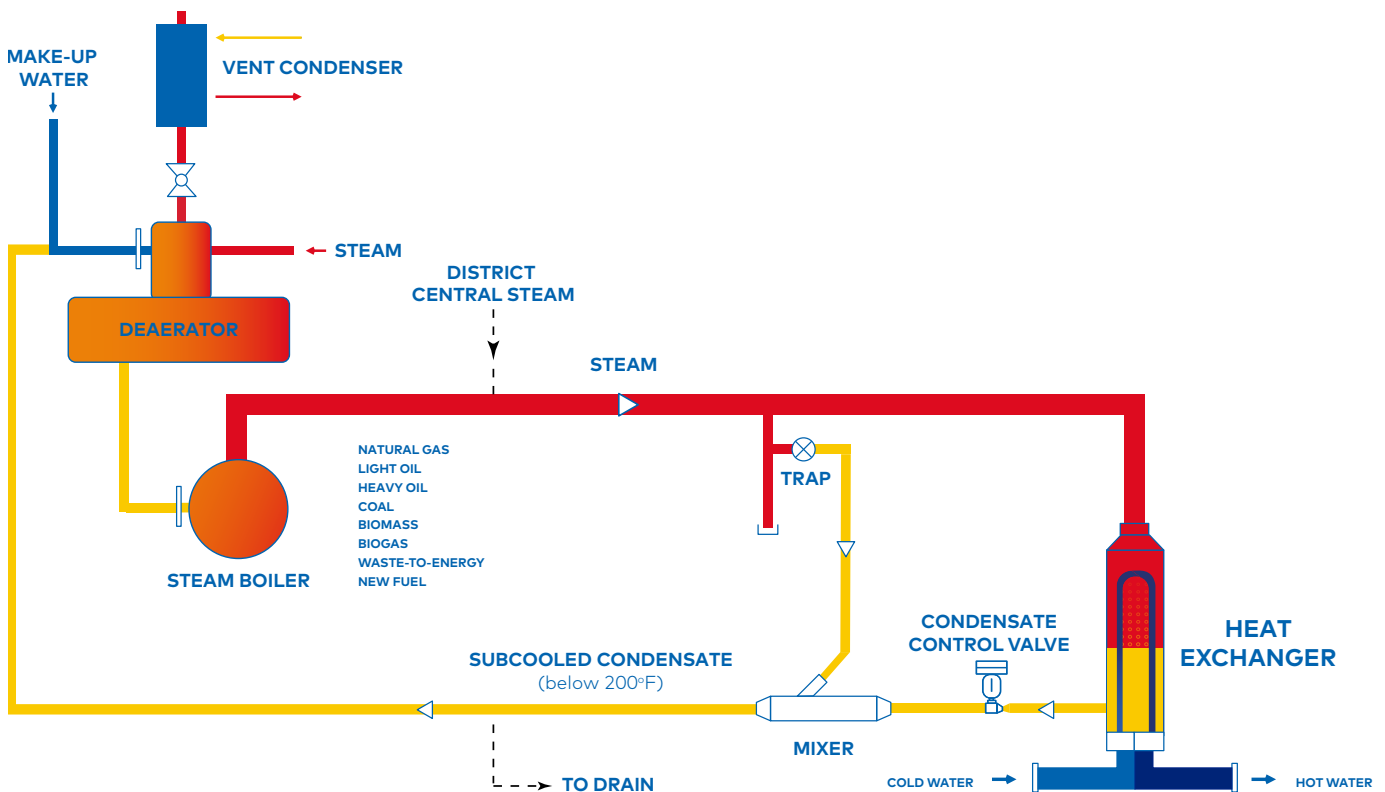## Domestic Hot Water & Process

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Features

- One vertical flooded U-tube heat exchanger

- Condensate control valve with subcooling condensate return below 200°F, resulting in a 0% flash return system

- Automatic steam start-up and shut-off valve

- Total install costs will be 20% less than any other method

- NEMA 4 control panel with an advanced programmable controller, graphic HMI display including BACnet, Lon, Modbus compatibility and remote access. **We are Internet of Things (IOT) ready with a OPC-UA embedded server**

- 5% to 8% energy savings and reduced carbon footprint

- Liquid stability set point at 2°F

MCU – Simplex Feedback

Technical Diagram

U.S. PATENT #6,857,467 B2
CAN. PATENT #2,416,353

MAKE-UP WATER

VENT CONDENSER

STEAM

DEAERATOR

DISTRICT CENTRAL STEAM

STEAM

STEAM

TRAP

NATURAL GAS
LIGHT OIL
HEAVY OIL
COAL
BIOMASS
BIOGAS
WASTE-TO-ENERGY
NEW FUEL

STEAM BOILER

SUBCOOLED CONDENSATE
(below 200°F)

CONDENSATE CONTROL VALVE

HEAT EXCHANGER

MIXER

TO DRAIN

COLD WATER

HOT WATER

All Maxi-Therm basic designs do not require:

- Steam pressure reducing station and no steam safety valve to roof

- Condensate return pump station

- Flash tank

- Steam vents to roof