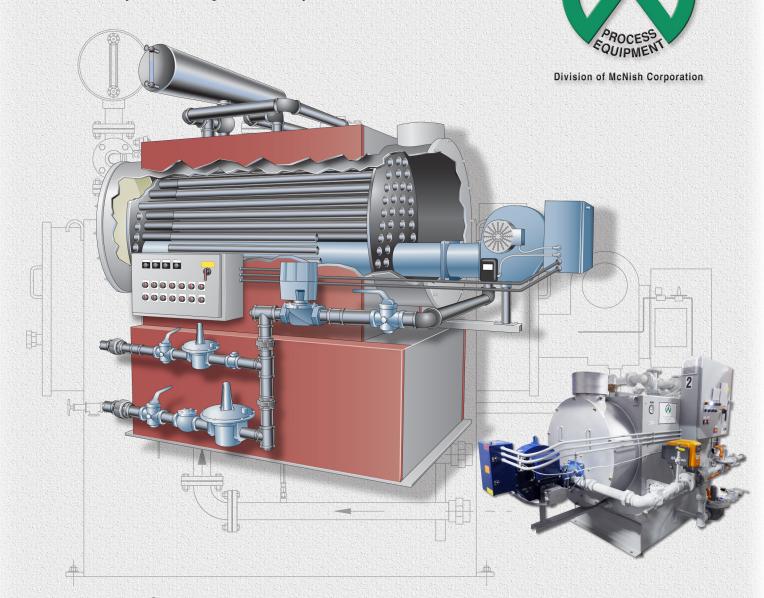
## Hot Water Boiler

Premier Industry Standard for over 60 years.



## Walker Process® Hot Water Boilers are Dual-Fuel, 2-Pass Scotch Marine Type designed and constructed in conformance with the latest ASME Boiler Codes.

Walker Process Equipment began supplying boilers for use in anaerobic digestion systems in the mid-1950s and have since then been continuously upgraded with the latest technology in materials and control components. Today, Walker Process® Boilers are in treatment plants throughout the world.

Our boilers that are still assembled and tested in our own factory in Aurora, Illinois. These boilers can be supplied as a stand-alone source of hot water for use in an anaerobic digestion system or with a Walker Process® Heat Exchanger as a small foot-print system for heating digesters.

- Rugged Scotch Marine Type Construction
- Dual Fuel Capable Burner –
  Digester Gas and Natural Gas or Propane or Fuel
  Oil
- Modulating Fuel Control Technology
- Removable Rear Door with Refractory
- Conservative Design Meets ASME Requirements
- Factory Tested and Independently Inspected Prior to being Stamped with "H" Designation.

Walker Process® Boilers are Scotch Marine fire tube type boilers with a highly efficient forced draft dualfuel burner system

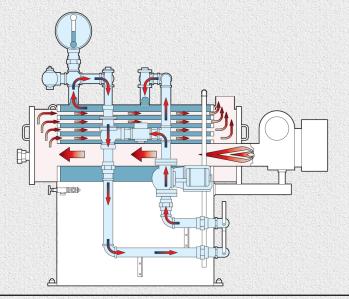
The Scotch type, dry-back boiler construction uses a long-life refractory lining to protect the removable boiler end plate where the heated gases turn back and enter the boiler tubes. The advantage of the dry-back construction is that it allows removal of the back plate without having to drain the water from the boiler. The removable back plate has the further advantage of permitting inspection and cleaning of the boiler tubes to maintain peak boiler efficiency.

The state-of-the-art dual-fuel capable burner uses digester gas as the primary fuel and can use either natural gas, propane, or fuel oil as the alternate fuel if digester gas pressure is low or not available. Control systems are available for automatic switch-over of fuel supply or with an automatic blend-in system using natural gas.

All Walker Process® Boilers are supplied with a complete electrical control system that includes a modulating control system that provides more flexible control of the set points than a simple on/off control. The modulated control of the burner reduces the thermal shock on the boiler that otherwise occurs with an on/off control system. The modulated flow controller also reduces the number of cycles of the burner shut down and start up and extends the life of the equipment.

The forced draft design exposes the blower to ambient air that is of constant density and not to the corrosive gasses in the exhaust stack. This allows a constant output of air and an easily controlled airfuel ratio that results in superior fuel efficiency.

All Walker Process® Boilers are constructed according to ASME Boiler and Pressure Vessel Code, Section IV and inspected in our supplier's factory by an independent qualified inspector and stamped with the ASME "H" designation. Each unit is shop assembled and thoroughly tested for leaks and control system functionality prior to shipment.



## Output at 80% efficiency

Boiler Unit Sizes | Btu/Hour

No. 1 272,000

No. 2 387,000

No. 3 525,000

No. 4 825,000

No. 5 1,040,000

No. 6 1,528,000

No. 7 2,000,000

The boiler control system is designed to maintain a minimum water temperature of 180°F in order to provide a sufficient heat source and to prevent damaging corrosion that may result from flue gas condensation that could occur at lower boiler temperatures.

Burner

Standard burners are forced draft type with an integral combustion air blower, ODP motor, gas valve, ignition transformer, blower air switch, gas pilot line with pressure regulator, and shut off valve. The standard flame scanner is UV or optional IR.

Fuel Control

Blend-In System

**Digester Gas/ Natural Gas** 

Switch-Over System Digester Gas/ Natural Gas Digester Gas/ Propane Digester Gas/ Fuel Oil

## **Walker Process Equipment**

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