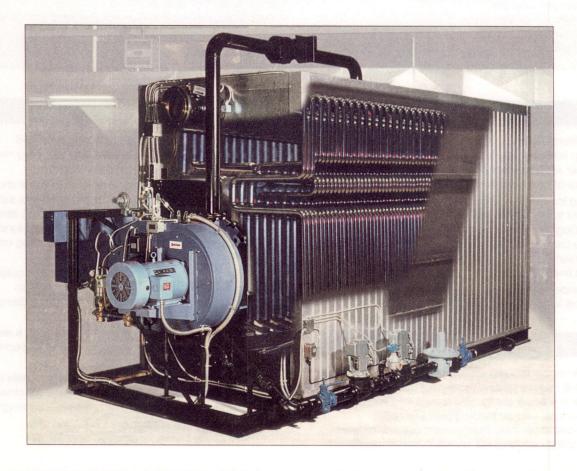
# The ThermoFlo Watertube Boiler

High Pressure, Low Pressure Steam
Low Temperature Hot Water Thermal Fluid
High Temperature Hot Water Water Glycol



#### Capacity

Convenient sizes from 15 BHP to 800 BHP output.

#### **Pressure**

Standard 160 PSIG to 200 PSIG or higher as specified.

#### **Fuels**

Natural gas, low BTU gas, oil or combination gas/oil.

#### **Efficiency**

Up to 85%.

#### Codes

ASME, National Board, UL, ULC and as specified.

#### **Emissions**

Compliance with all current low NOX regulations.

**Exclusive distributor for IBW** 





## The ThermoFlo Watertube Boiler

#### **Standard Equipment**

- · Operating Controls.
- · High Limit Controls with Manual Reset.
- · Modulating or High Low Controller.
- Pressure Gauge.
- Safety Relief Valve(s).
- Probe Type Low Water Cut Off.
- · Fully Modulating or High Low Burner.

- · Boiler or Burner Mounted Control Panel.
- Flame Safeguard Control.
- Convenient Operator controls and Status Lights.
- · Main and Pilot Fuel Trains.
- Optional Combustion Control Systems and Boiler Trims are available to comply with the most stringent specifications and applications.

#### **Efficiency**

- The ThermoFlo Watertube Boiler is a multipass design with five longitudinal gas passes. Heat transfer and turbulent gas flow is maintained without the use of convection pass baffles.
- Casing insulation characteristics are excellent. The tangent tube furnace walls are insulated with 2" thick 1900 Deg F ceramic blanket secured by the heavy gauge steel inner casing panels. The mill finished aluminium outer cladding allows for a suitable air gap and is lined with fibreglass insulation.
- Efficiencies of 85% are normal without the use of external heat recovery equipment.

#### **Emission Standards**

 The generous furnace volume design and resultant low heat release rates with minimal use of refractory results in a boiler design that is excellent for low NOX applications. Actual tests have proven NOX emissions lower than most current regulations even when using conventional standard burner equipment.

Symmetrical Design

- True symmetrical tube layout with balanced combustion gas and fluid velocities.
- Symmetrical tube configuration allows for minimal tube removal clearances and less than half a boiler width is required between boilers in multiple unit installations.

#### **Low Maintenance**

- All inner and outer casing panels are bolted construction for ease of assembly and easy removal for maintenance.
- The ThermoFlo Watertube Boiler is thermal shock proof on the fluid side and combustion gas side.
   Water return temperatures to the boiler are above the flue gas dew point. Differential temperatures of up to 150 Deg F can be achieved when operating on high temperature water or thermal fluid.
- A large diameter rear downcomer located outside the combustion zone provides excellent natural circulation. There is no requirement for external circulating pumps.
- Access to the furnace is available through a rear door without changing the burner setting or disconnecting fuel piping.
- Rear convection pass optional access panels can be provided on fuel oil fired units for periodic cleaning.
   No convection pass baffles are used, cleaning is unrestricted.

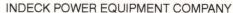
#### Retrofit

 The ThermoFlo Watertube Boiler is ideal for boiler replacement projects. The entire unit can be supplied as a field assembly kit and is easily erected on site when boiler room access is a problem. As the entire boiler assembly is bolted and the tubes can utilise a drive fit there are no requirements for site welding or pressure vessel welding certificates.

### **Additional Balanced Watertube Designs**

- High Temperature Hot Water Boilers to 415 Deg F.
- High and Low Temperature Water Glycol Heaters to 350 Deg F.
- Thermal Oil Heaters to 550 Deg F.
- High Steam Boilers to 600 PSIG.
- Forced Circulation Steam Boilers.
- Low Water Content Steam Boilers.





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