



Unfired Steam Boilers

Steam | High-Temp Water | Thermal Fluids

Process Steam

Unfired steam boilers are used to protect fired boilers from harmful chemicals in the return condensate, such as pulp and paper processing. Unfired steam boiler tube bundles and/or drum can be fabricated using materials that will be cost effective for the process steam condition. These can range from copper tube bundles and pressure vessel quality steel to tube bundles made from cupro-nickel or stainless steel tubing and drums fabricated with stainless steel.

Clean Steam

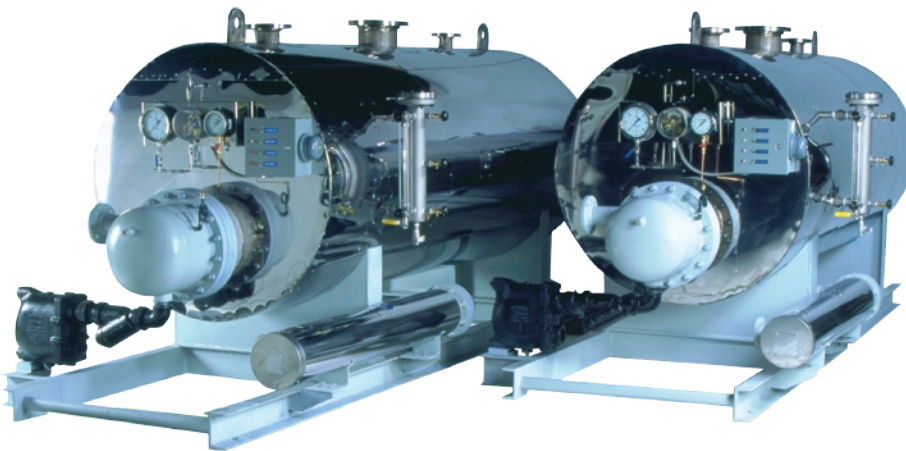
Clean steam unfired steam boilers provide clean steam by using feed water that is free from boiler water treatment chemicals. Clean steam is used by the food industry for cooking and cleaning and is also used for many sterilization and humidification applications.

Pure Steam

More and more applications are requiring ultra pure steam for sterilization in Bio-science research, pharmaceutical research and/or processing, medical sterilization and high-tech clean room humidity control. Pure steam boilers are normally fabricated with special high quality stainless steel vessel material and components to handle the aggressive feedwater used in these applications.

Features

- Properly sized, with horizontal, vertical and compact Mini-Pack™ style boiler choice
- Independent bolting for easy inspection and maintenance
- Heavy steel track support bundle
- Wide range of options available



- ✓ ***Moisture separator for dry steam***
- ✓ ***Quality components for high performance and best value***
- ✓ ***Water or steam application***

The Ace Series unfired steam boilers perform dependably and quietly, engineered to meet specific steam needs for industrial, institutional and commercial facilities. Quality U-tube bundles provide uniform heat transfer, resulting in high thermal efficiency and long boiler life.

Unfired Steam Boiler



Standard Equipment

Tank

- A.S.M.E. Section VIII Div 1 vessel
- National Board registered
- 50 psig design working pressure
- Horizontal, carbon steel construction with internal steam separator
- 12" x 16" manway on 42" diameter and larger tanks; inspection openings for below 42"
- Lifting lugs
- Process steam application

Tube Bundle

- 150 psig design working pressure
- SB-75 seamless copper U-tube
- Single wall tubing
- Removable bundle
- Steel cap and tubesheet
- Lifting straps or lugs

Controls

- Pilot operated steam control valve
- ASME pressure relief valve
- Main steam trap
- Pressure gauge panel with high limit switch
- Steam cap pressure gauge
- Conductivity type feed water and level control

Support

- Skid mounted horizontal tank with saddles

Insulation & Jacketing

- Mirror finish stainless steel jacket
- 2" insulation

Optional Equipment

Tank

- 150 psig design working pressure
- Vertical & compact Mini-Pack™ style models available
- Clean or Pure steam application with stainless steel construction

Tube Bundle

- Copper, 90/10 cupro-nickel or 304/316 stainless steel tubing

Controls

- Pneumatic, or electric control valve
- Feed water solenoid valve
- By-pass for feed water
- Auxiliary high water probe alarm
- Bottom blow down system
 - Surface blow down system
 - Solenoid assembly with clock
- TDS or conductivity blow down system
- Relay contacts for BMS
- 4-20mA transmission
- ModBus capability
- Secondary low water cut-off

Support

- Vertical: skid mounted with pipe legs
- Mini-Pack™ style: steel stand

Insulation & Jacketing

- 3" insulation

