



Steam...safe, sure, simple

Lattner HRT Boilers with Power Burners

High Efficiency Gas/Oil Burners
5 to 60 HP
172 to 2070 LB/Steam/Hr 212° F

Description

The durable ASME CODE modified horizontal return tubular (HRT) boiler is the modern version of a time-tested design; featuring a large amount of heating surface. Each boiler is completely automatic with pressure controls and low water cut offs. All joints and seams are welded and hydrostatically tested. Constructed of heavy 1/4" or 5/16" thick steel. High overall efficiency helps keep operating costs low.

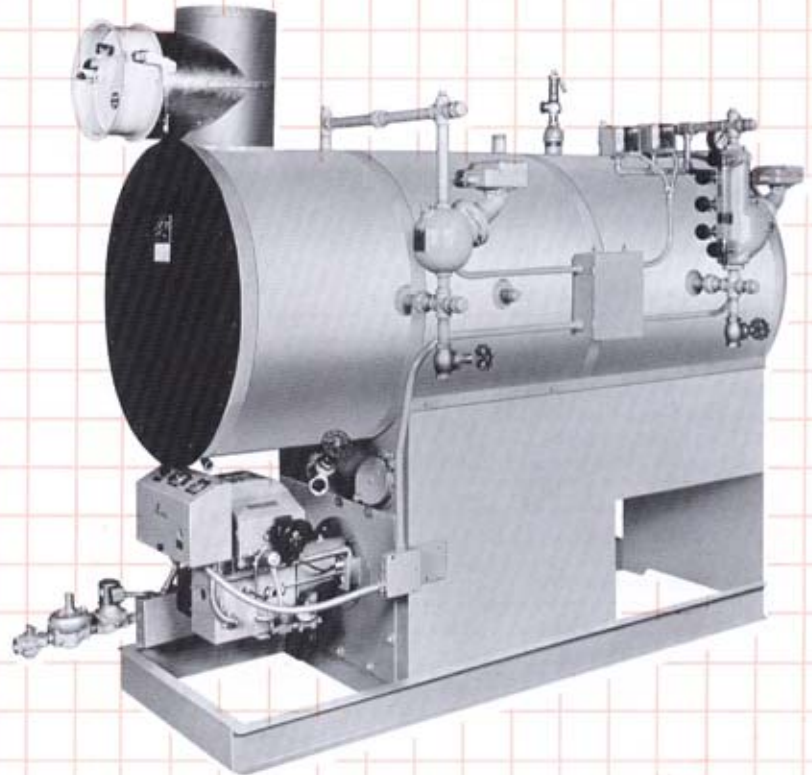
All boilers completely assembled at the factory —only the trim and controls are removed before shipping and can be quickly reassembled.

Burners: Single or Dual fuel.

Dual fuel burners provide flexibility in selecting best options on available fuels.

Use any combination of No. 2 fuel oil, natural gas, L.P. gas or sewage gas.

Standard burners are U/L listed. IRI or FM units are available.



User Benefits

- Safe, reliable steam. **With up to 10 sq. ft. of heating surface per HP**, this boiler is designed with simple, trouble-free burner equipment.

Results; Low stack temperatures and 80% plus overall efficiency; steady, even distribution of heat to boiler water; and no troublesome hot spots or burned tube ends.

- Easy, routine maintenance. This boiler is not quickly affected by lime and scale deposits due to the large heating surface. Removable cover plates at each end of the boiler allow easy access to handhole plates and boiler tubes for inspection.

- Durability is guaranteed. All construction is in accordance with ASME CODE for 150 psi. National Board Registered. Plus a reasonable one year warranty backed by over 75 years of responsible customer service. Parts, when needed, are usually shipped on same day ordered. Thousands of HRT's have been installed since 1950.

Applications

- Dry Cleaning is a perfect application. The HRT is a proven "work-horse" for dry cleaning operations, e.g. Big B Cleaners, Pilgrim, Serv-Quik, Etc.

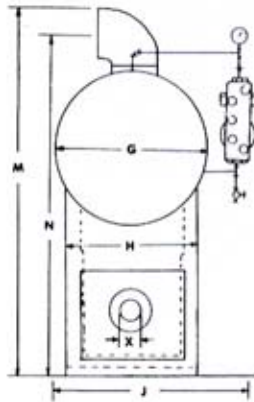
- Humidification of high-tech environments such as computer rooms, printing plants, libraries and museums. (e.g. The Field Museum of Natural History in Chicago)

- Sterilization in medical or laboratory environments such as surgical instruments in an autoclave.

- Manufacturing/Commercial processes such as retreading, plastic vacuum forming, metals cleaning prior to plating and other systems requiring a dependable-temperature heat source.

- Food processing in cafeteria kitchens, sea food preparations, honey processing and steam jacketed kettles in candy making.

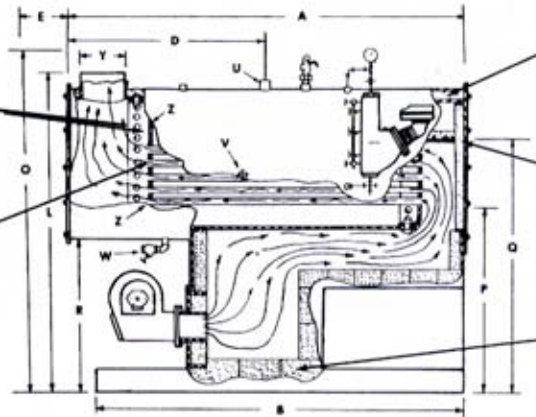
Check with Lattner for their experience with your application.



DRY STEAM

Large steam release area assures dry steam and eliminates priming.

All boiler tubes submerged.



External insulation on boiler shell covered by metal jacket.

High temp. internal insulation in cover and sides.

Thick insulating fire brick lines entire combustion chamber.

Specifications:

BOILER MODEL	5 HRT	10 HRT	20 HRT	30 HRT	40 HRT	60 HRT
Normal Input, Thousand B.TU.....	230	460	840	1260	1680	2500
Horsepower Output, (6)	5.5	11	20	30	40	60
Steam Output, lbs./hr.....	190	380	690	1035	1380	2070
Heating Surface, Sq. Ft.....	54	104	153	257	355	512
Shipping Weight, Approx. Lbs.....	1800	2800	3700	5000	6900	8350

LENGTHS

	5 HRT	10 HRT	20 HRT	30 HRT	40 HRT	60 HRT
OverallA	5'-3"	7'-2"	7'-8"	8'-0"	9'-9"	10'-6"
Base Frame (5).....B	3'-6"	6'-4"	7'-1 1/2"	7'-3"	8'-11"	9'-8"
Base less frame extensionC	3'-6"	5'-2 1/2"	5'-5"	5'-7"	6'-10"	7'-6"
End Cap to Steam OutletD	2'-9"	3'-9"	4'-2"	4'-4"	4'-10"	5'-3"
Clearance for Tube Removal, Stack End . . . E	2'-5"	3'-8"	3'-9"	3'-11"	5'-0"	4'-9"

WIDTHS

	5 HRT	10 HRT	20 HRT	30 HRT	40 HRT	60 HRT
Boiler StrippedG	27 1/2"	32 1/2"	36 1/2"	43 1/2"	45 1/2"	49 1/2"
Base.....H	22"	26"	29"	35 1/2"	38"	42"
Overall with Controls (3).....J	36 1/2"	41 1/2"	45 1/2"	52 1/2"	54 1/2"	61"

HEIGHTS

	5 HRT	10 HRT	20 HRT	30 HRT	40 HRT	60 HRT
Boiler Stripped (2).....L	4'-10"	5'-1"	5'-8"	6'-4"	6'-11"	7'-8 1/2"
Top of Stack Elbow (1)M	5'-8"	6'-2"	6'-11"	7'-9"	8'-7"	9'-7 1/2"
Center Line of Stack Elbow (1)N	5'-4"	5'-9"	6'-5"	7'-2"	7'-11"	8'-7 1/2"
Top of Safety Valve (1) & (4)O	5'-6"	5'-9"	6'-4"	7'-4"	7'-10"	9'-7 1/2"
Base.....P	3'-2"	3'-1"	3'-5"	3'-11"	4'-3 1/2"	4'-10 1/2"
To Water Line (Pump Off).....Q	48 1/2"	50 1/4"	57"	65"	71 1/4"	80 1/2"
Floor to JacketR	29 1/2"	27 1/2"	30"	33"	37"	44 1/2"

BOILER CONNECTIONS

	5 HRT	10 HRT	20 HRT	30 HRT	40 HRT	60 HRT
Steam Outlet.....U	1 1/4"	2"	2"	2"	2 1/2"	3"
Feed Water Inlet (3)V	1"	1"	1"	1 1/2"	1 1/2"	1 1/4"
Blow-off ValveW	1"	1"	1 1/4"	1 1/4"	1 1/4"	1 1/4"
Dia. of Burner Opening IDX	4 1/2"	5 3/8"	7"	7"	8"	8"
Stack Outlet, ODY	6"	6"	8"	10"	12"	12"

MISCELLANEOUS

	5 HRT	10 HRT	20 HRT	30 HRT	40 HRT	60 HRT
Handholes, 2 3/4" x 3 3/4".....Z	2	2	2	2	2	1
Boiler Shell Diameter ID.....	23"	28"	32"	38"	40"	44"
Water Capacity, Approx.....Gal.	43	95	125	184	250	300
Burner Nozzle Size, Oil only.....G.P.H.	1.75	3.5	6	9	12	18
Total Furnace Volume.....Cu. Ft.	4.26	8.3	14.7	21.9	37.7	49.8

Boiler unit includes all standard boiler trim, water column, draft regulator, insulating firebrick lined combustion chamber, insulated metal jacket. Burner when furnished includes electric ignition, combustion control switch and pressure switch.

- (1) On special order boiler can be furnished with stack opening in end cap. This will reduce overall height to dimension O. (Also see Note 4)
- (2) Boiler is welded to base on all standard units. On special order the boiler and base can be flanged and bolted together so that they can be separated for movement through small openings.
- (3) Openings are provided so water column, control equipment, and feed water inlet can be used on either side of boiler. Standard factory mounting is as shown above.
- (4) Safety valve height can be lowered by approximately 5' by removing nipple and coupling and installing valve directly in boiler.
- (5) Base extension on 10 HP and larger can be left off on special order to make overall base length the same as C.
- (6) Horsepower ratings are for elevations below 2000 ft. above sea level. Reduce horsepower ratings by 4% for each additional 1000 ft. of elevation.



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