

LATTNER

Vertical Waterleg Tubeless Boilers WLF IV Series 9.5-50 HP, Power Burner



Proven Four Pass Efficiency

Innovative Serviceable Shape: Now You Can Make Your Steam Easier and Faster; Compact & Cooler

Steam 9.5-50 HP, Natural or LP Gas

■ Four-Pass High Efficiency Power Burner; Up to 150 PSIG; 328 to 1725 LBS/Steam/Hr @212° F

■ For Dry Cleaning, Laundry Apparel; Humidification; Sterilization Manufacturing & Commercial Processes; Health & Exercise Clubs; Steam Rooms; Food Preparation & Processing



Safe • Sure • Simple

Proven Four Pass Efficiency

Lattner WLF IV Vertical Tubeless Boiler

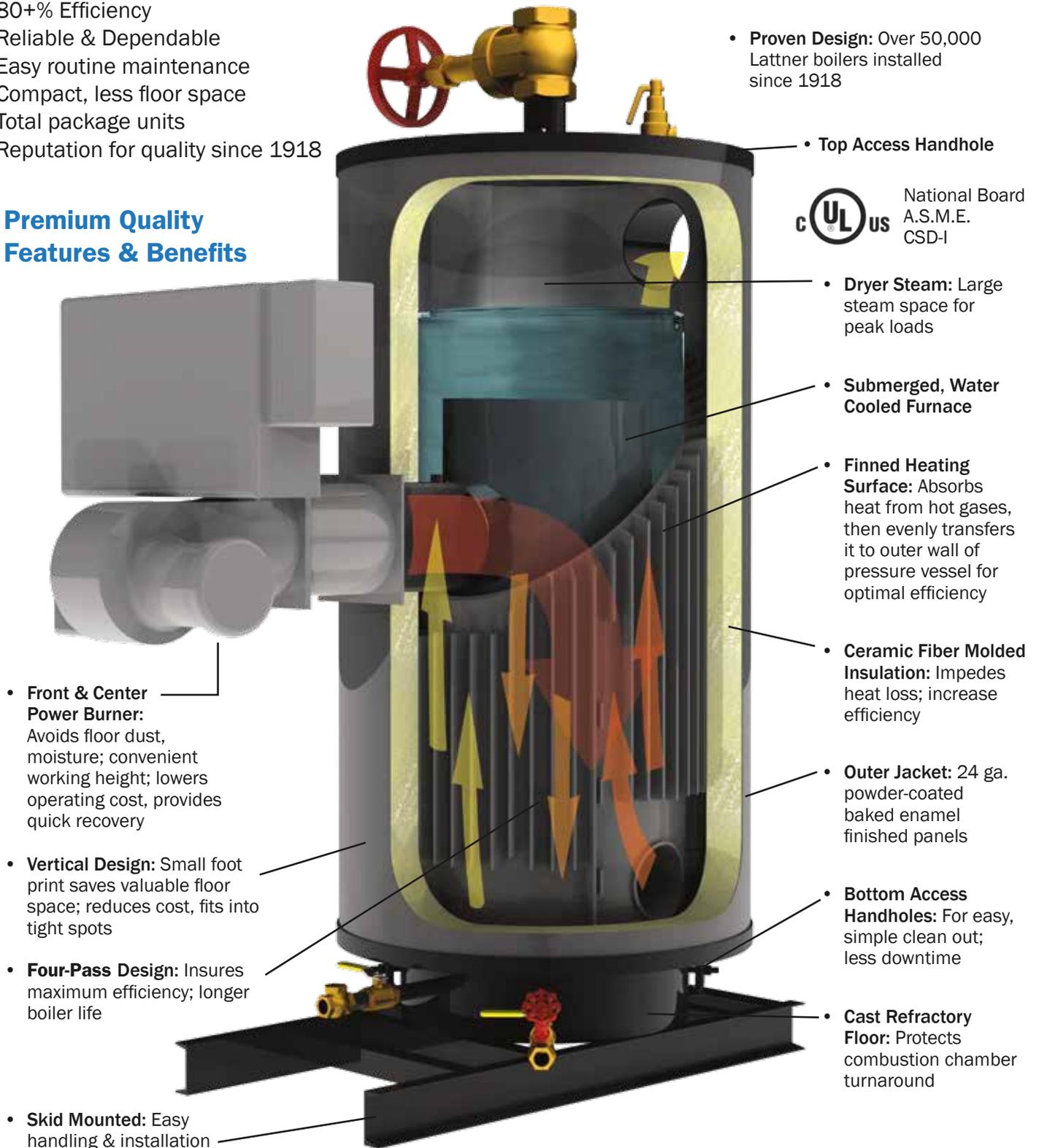
8 Sizes, 9.5-50 HP Gas

The Reliable WLF IV Series Features a Four Pass Heating Surface For Maximum Power

- 80+% Efficiency
- Reliable & Dependable
- Easy routine maintenance
- Compact, less floor space
- Total package units
- Reputation for quality since 1918

Premium Quality Features & Benefits

- **Proven Design:** Over 50,000 Lattner boilers installed since 1918



- **Top Access Handhole**

- **Dryer Steam:** Large steam space for peak loads

- **Submerged, Water Cooled Furnace**

- **Finned Heating Surface:** Absorbs heat from hot gases, then evenly transfers it to outer wall of pressure vessel for optimal efficiency

- **Ceramic Fiber Molded Insulation:** Impedes heat loss; increase efficiency

- **Outer Jacket:** 24 ga. powder-coated baked enamel finished panels

- **Bottom Access Handholes:** For easy, simple clean out; less downtime

- **Cast Refractory Floor:** Protects combustion chamber turnaround

- **Front & Center Power Burner:** Avoids floor dust, moisture; convenient working height; lowers operating cost, provides quick recovery

- **Vertical Design:** Small foot print saves valuable floor space; reduces cost, fits into tight spots

- **Four-Pass Design:** Insures maximum efficiency; longer boiler life

- **Skid Mounted:** Easy handling & installation

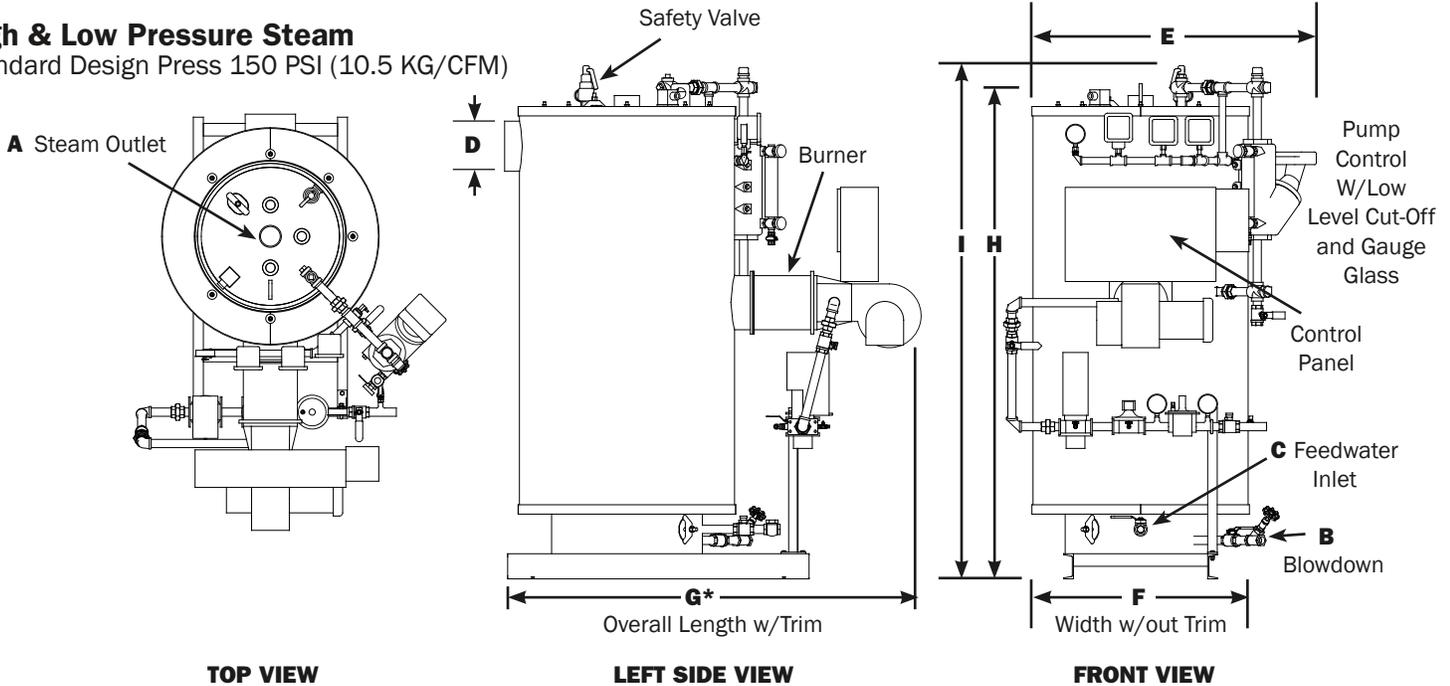
Applications

- Dry cleaning is a perfect application.
- 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
- Health/Exercise Club steam room systems (e.g. Equinox and Bally Health Spas) or the newer condo/apartment complexes with spas and hot tub rooms.
- Food processing in the cafeteria kitchens, sea food preparations, honey processing and steam jacketed kettles in candy making.
- Breweries and Distilleries

Boilers to Fit Every Need

High & Low Pressure Steam

Standard Design Press 150 PSI (10.5 KG/CFM)



DIMENSIONS

Boiler Horsepower		9.5/10	15	20	25	30	40	50
Steam Output	Lbs./Hr.	345	518	690	863	1035	1380	1725
From & At 212° F	KG./Hr.	157	235	313	392	470	626	783
Input Required	BTU x 1000	418	628	837	1046	1255	1675	2100
A	Steam Outlet 150 psi	1 1/2"	1 1/2"	2"	2"	2"	2"	3"
	Steam Outlet 15 psi	2"	2 1/2"	3"	3"	4"	4"	6"
B	Blowdown	1"	1"	1"	1"	1 1/4"	1 1/4"	1 1/4"
C	Feedwater	1"	1"	1"	1"	1"	1"	1 1/4"
D	Stack Diameter	8"	8"	8"	8"	10"	12"	12"
E	Overall Width w/Trim	47"	47"	47"	47"	55"	60"	73"
F	Width w/o Trim	35 1/2"	35 1/2"	35 1/2"	35 1/2"	43 1/2"	43 1/2"	59"
G	Overall Length w/Trim	55"	55"	55"	55"	71"	83"	100"
	* Add for burner removal	12"	12"	12"	12"	14"	14"	20"
H	Height w/o Trim	68"	68"	75"	77"	78"	94"	96"
I	Overall Height	74"	74"	80"	82"	83"	94"	99"
	Gas Connection	1"	1"	1 1/4"	1 1/4"	1 1/4"	1 1/2"	1 1/2"
	Steam Release Area	In. ²	423	423	423	680	1134	1520
	Water Cap. @ NWL	Gals.	53	55	57	57	75	130
	Shipping Weight	Lbs.	2000	2000	2100	2200	2900	3700

Standard Steam Trim

- Steam pressure gauge, with test cock and drain
- Combination low water cut-off and pump control
- Auxiliary low water cut-off with manual reset
- Water level gauge set w/ drain valve
- ASME safety relief valve
- Operating and high limit pressure controls
- Trimmed for 15 or 150 psi
- Standard vessel design ASME Section I
- Optional vessel design ASME Section IV

Dimensions subject to change without notice, certified drawing available with order. All dimensions in inches.

* G dimension varies with burner choice. Add clearance for burner removal.

SAMPLE SPECIFICATIONS

MODEL WLF IV VERTICAL TUBELESS STEAM BOILERS

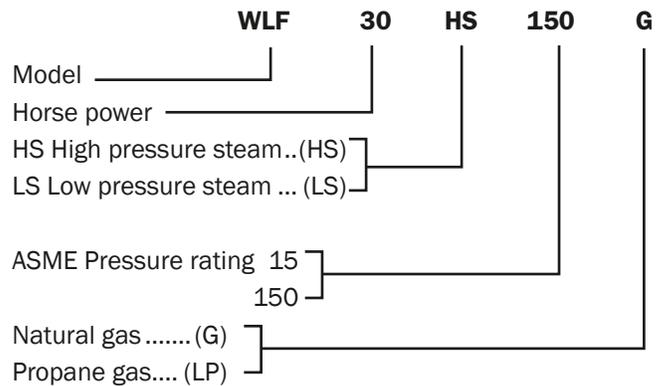
1. Furnish and install Lattner vertical watering tubeless steam boiler(s) _____horsepower, natural gas, propane gas, steam boiler. Boiler to be of all welded four-pass design, ASME Code and National Board stamped for _____ psi design pressure. Boiler operating pressure to be _____ psi.
2. Boiler shall be of vertical tubeless ASME design with 3/8" thick steel furnace wall to assure long boiler life. Boiler shall be mounted on 4" steel channels and fitted with lifting lug(s). Water capacity at a normal level shall be _____ gal., with a minimum of _____ sq.. in. of steam release area to insure high quality (dry) steam.
3. For maximum efficiency, the boiler shall include additional ASME heating surface provided by solid steel strips, which have been securely welded to the shell exterior. Boiler shall include two or more handhole plates in vessel for cleaning and inspection.
4. Boiler shall be insulated with a molded flame barrier and 3.5 inch thick ceramic fiber, which exceeds 8 lbs./cf density. Boiler outer jacket to be 24 gauge steel with chip and heat resistant high gloss polyester urethane powder coated on both sides for protection from corrosion.
5. Boiler shall be fired from a front and center mounted UL-CSD-1 listed and approved multi-orificed, forced draft power burner with flame safe-guard programmer and ultra-violet sensor to supervise ignition and the complete firing cycle. Gas pressure shall be 7" to 14" W.C. Control system will utilize 115 volt, single phase power from 15 amp protected circuit. On/off operation is standard except for 40 to 50 h.p. which are Low/High/Off.
6. Boiler shall be complete with UL and CSD-1 trim as follows:
Operating pressure control, high pressure limit with manual reset, float type level control with primary low water cut-off, auxiliary probe-type low water cut-off with manual reset, blow-off valves for boiler and level control, diaphragm and/or motorized gas valve, safety relief valve, steam pressure gauge, water gauge sight glass with protector.
7. Controls will be mounted, wired and factory tested prior to shipment.
8. Optional equipment and controls

- Night operating pressure switch package
- Surface skimmer, manual or automatic
- Low water alarm
- IRI controls
- Full modulation burner
- Low Hi Low burner
- High gas pressure _____ Psig
- Low gas pressure _____ W.C.
- Low NOx
- 3-phase motor
- TEFC motor
- Stack thermometer
- Barometric damper
- Auto bottom blowdown
- Blowdown separator
- Aftercooler manual or automatic
- Feed water System/condensate return
- Skid mount boiler, return system and blowdown separator
- ASME piping hydro with P-6 Data Report

BOILER/BURNER START-UP SERVICE

A factory-authorized representative should provide start-up service and training of the operator. Contact factory for arrangements.

MODEL DESIGNATION



HOW TO ORDER

Specify:

- Model Designation (see above)
- Vessel design pressure
- Steam operating pressure
- Fuel(s) being fired; i.e: natural gas, propane
- Code requirements; i.e.: UL,CSD-1, FM, IRI, CRN
- Application (drycleaning/laundry, process)
- Shipping instructions
- Optional features
 - Boiler feed system/Condensate return system
 - Blow-down separator w/legs
 - Automatic bottom blowdown
 - Automatic aftercooler w/thermometer
 - Alarms: __ low water __ high water __ high pressure

MANUFACTURER'S WARRANTY

A Lattner boiler shell is guaranteed to be constructed in accordance with the ASME Code. A boiler inspector, not in our employ, certified by the National Board of Boiler and Pressure Vessel Inspectors, supervises the construction, gives final hydrostatic test, and places stamp of approval on the completed shell.

Boiler accessories are guaranteed for one year from date of shipment against defective workmanship and material and such items will be replaced FOB factory. Liability for damages caused by such defective parts is limited to such replacements and in no event shall LATTNER be liable for indirect or consequential damages.

FOR COMPLETE WARRANTY, SEE FORM NO. W01-17.



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