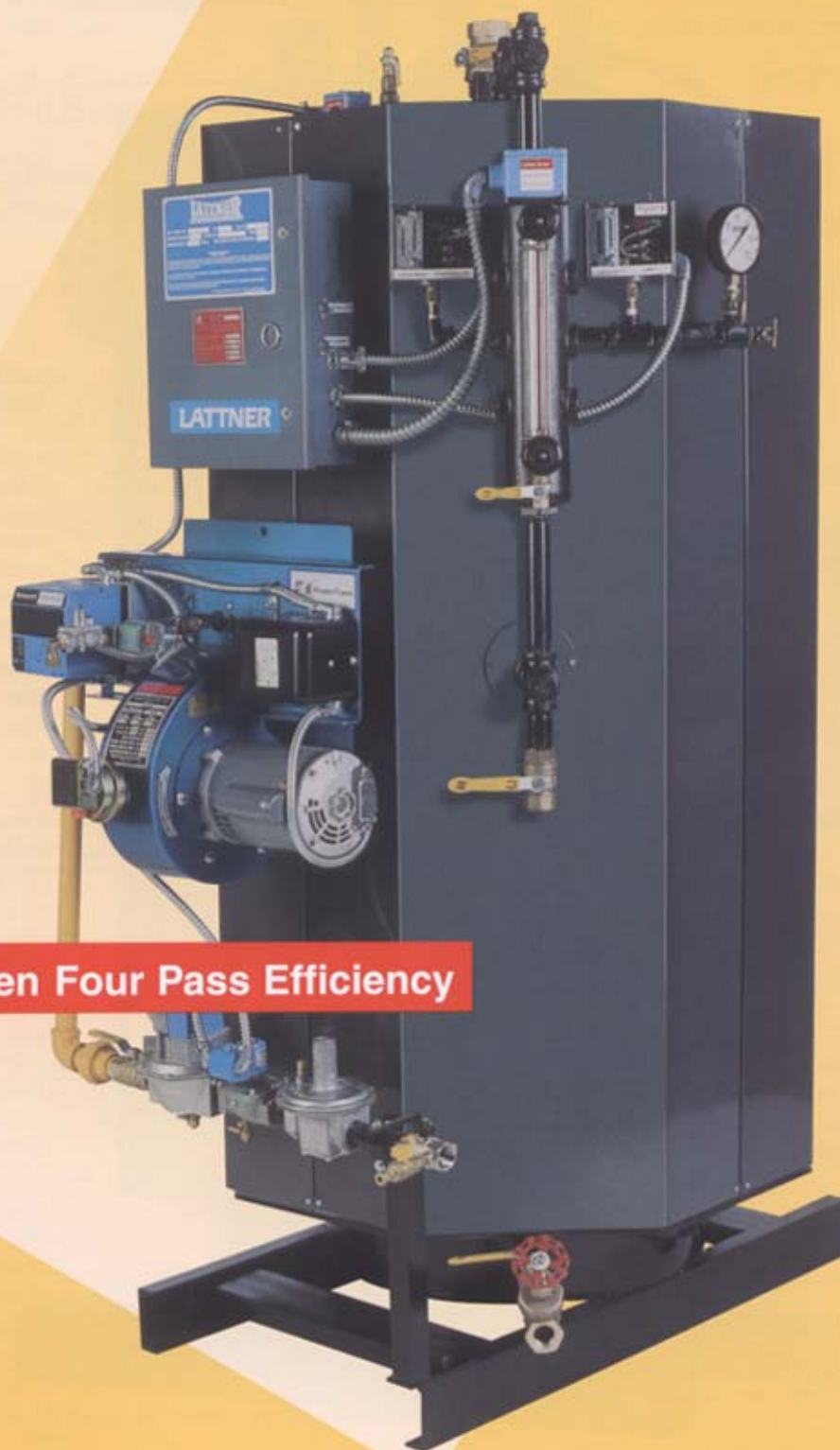


# LATTNER

## 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

**LATTNER**

*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

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

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

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

• **New Panel Design:** For easy-to-service access

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

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

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

• **Top Access Handhole**



National Board  
A.S.M.E.  
CSD-I

• **Submerged, Water Cooled Furnace**

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

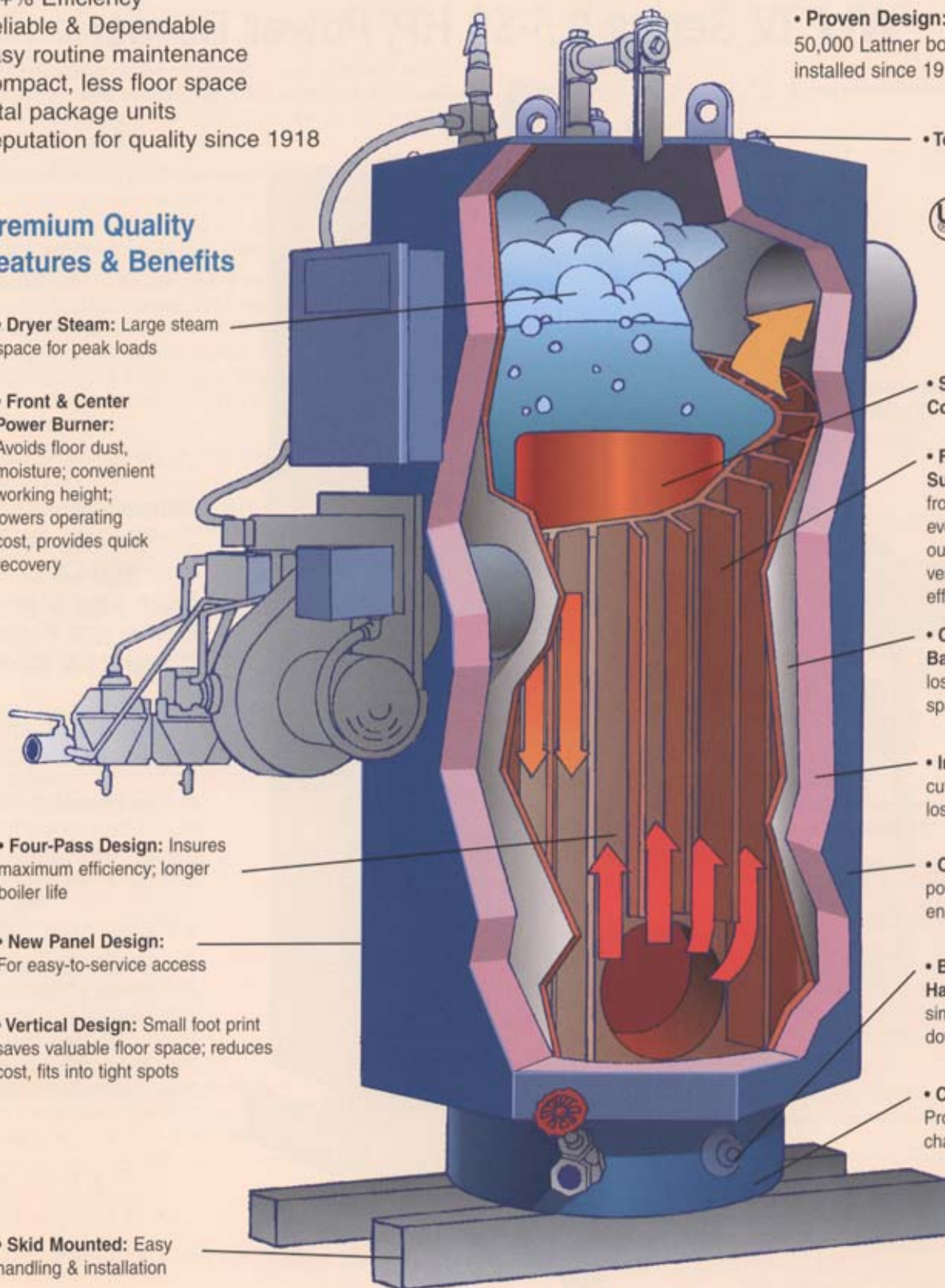
• **Ceramic Thermal Barrier:** Impedes heat loss; helps keep work space cooler

• **Insulation:** Multi layers cut fuel bills; prevent heat loss into environment

• **Outer Jacket:** High-gloss powder-coated baked enamel finished panels

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

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



## 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 and

other systems requiring a dependable temperature heat source.

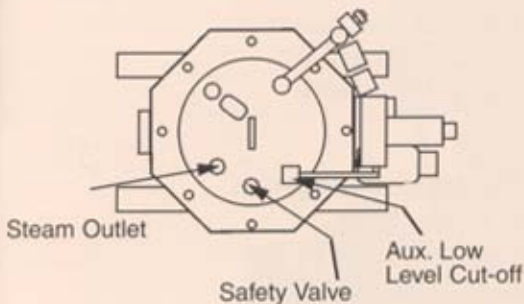
- Health/Exercise Club steam room systems (e.g. Vic Tanney and European Health Spas) or the newer condo/apartment complexes with spas and hot tub rooms.
- Food processing in cafeteria kitchens, sea food preparations, honey processing and steam jacketed kettles in candy making.

Check with Lattner for their experience with your application.

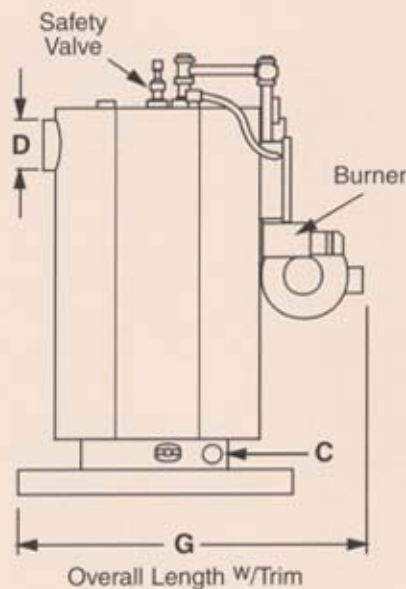
## Boilers to Fit Every Need

### High & Low Pressure Steam

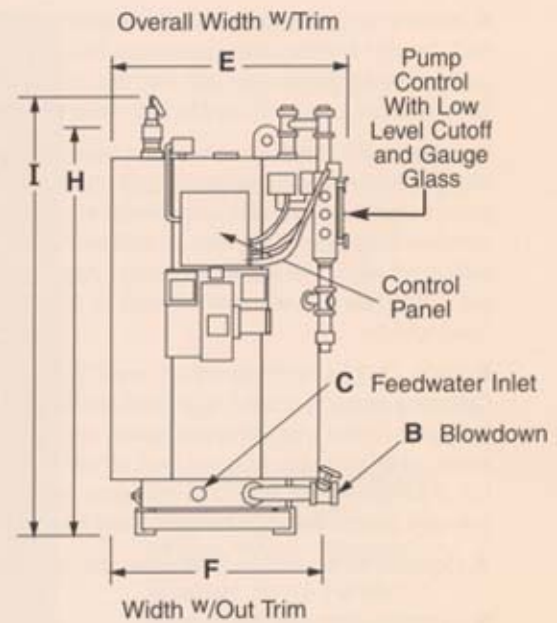
Standard Design Press. 150 PSI (10.5 KG/CM<sup>2</sup>)



TOP VIEW



LEFT SIDE VIEW



FRONT VIEW

## 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	
	KCAL x 1000	105.3	158	211	264	317	421	526	
A	Steam Outlet	150psi	1½"	1½"	2"	2"	2½"	3"	
B	Blowdown		1"	1"	1"	1¼"	1¼"	1½"	
C	Feedwater		1"	1"	1"	1"	1"	1¼"	
D	Stack Diameter		8"	8"	8"	8"	10"	12"	
E	Overall Width w/Trim		44"	44"	44"	44"	49"	57"	73"
F	Width w/o Trim		35¾"	35¾"	35¾"	35¾"	45"	49"	63"
G	Overall Length w/Trim		55"	55"	55"	55"	69"	75"	100"
H	Height w/o Trim		68"	68"	75"	77"	78"	94"	101"
I	Overall Height		74"	74"	80"	82"	83"	94"	101"
Gas Connection			1"	1"	1"	1"	1"	1½"	1½"
Steam Release Area		In. <sup>2</sup>	423	423	423	423	680	1134	1520
Water Cap. @ NWL		Gals.	53	55	57	57	75	130	163
Shipping Weight		Lbs.	2000	2000	2100	2200	2900	3700	5500

### 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 (optional pressures to 300 psi)

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

## SAMPLE SPECIFICATIONS

### MODEL WLF IV VERTICAL TUBELESS STEAM BOILERS

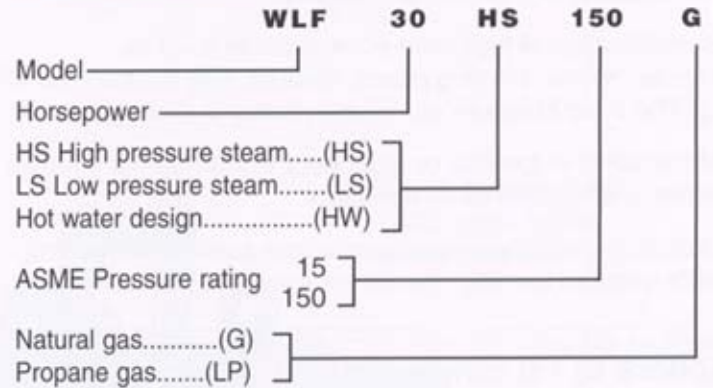
1. Furnish and install Lattner vertical waterleg tubeless steam boiler(s) \_\_\_\_\_horsepower,  natural gas,  propane gas, steam boiler. Boiler to be of all welded four-pass design, ASME Code and National Board stamped for \_\_\_\_\_ psi design pressure. Boiler operating pressure to be \_\_\_\_\_ psi.
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 non-metallic flame barrier and 3.5 inch thick ceramic blanket, which exceeds 8 lbs./cf density. Boiler outer jacket to be 16 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 and 50 h.p. which are Low/High/Low.
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 blow down separator
- ASME piping hydro w/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
- 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. 2-98



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