



HURST

BOILER & WELDING CO., INC.

AVAILABLE WITH LOW NOX

HURST SERIES LPX

MODIFIED SCOTCH MARINE
2-PASS Fire Tube Design
Wetback Construction
Thru-the-Door Concept

LOW PRESSURE BOILER
Capacities From 30 to 125 BHP.
1,004 to 4,184 MBTU/HR.

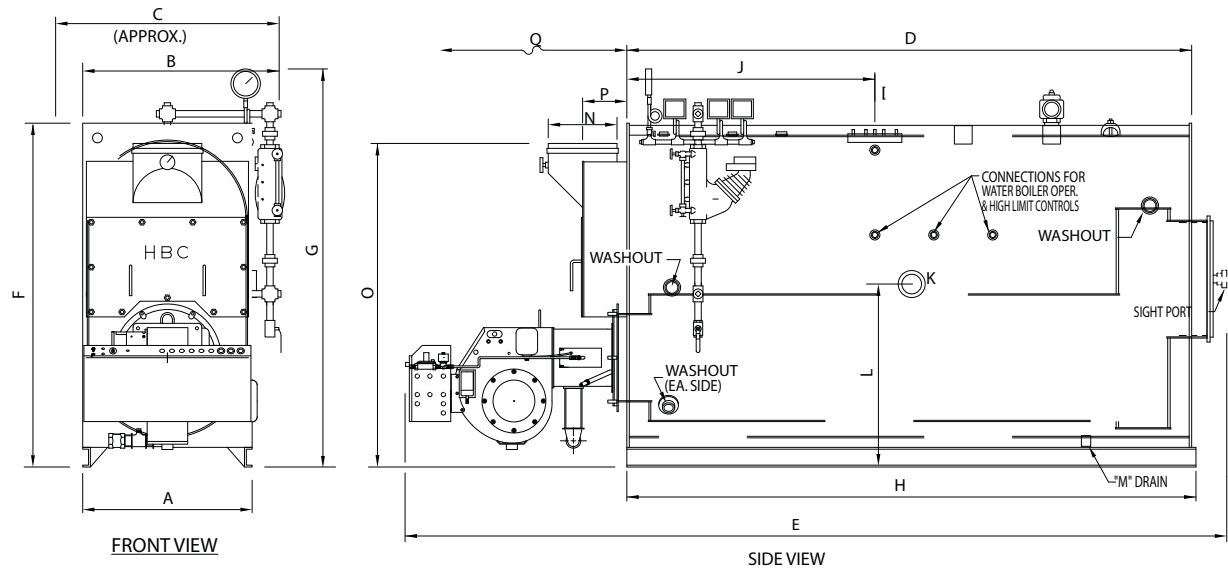


*Designed for minimal clearances
where installation and floor space are
challenging*

STEAM
Pressures to 15 PSI.

HOT WATER
Section IV
Pressures to 60 PSI.

HURST PERFORMANCE SERIES BOILERS



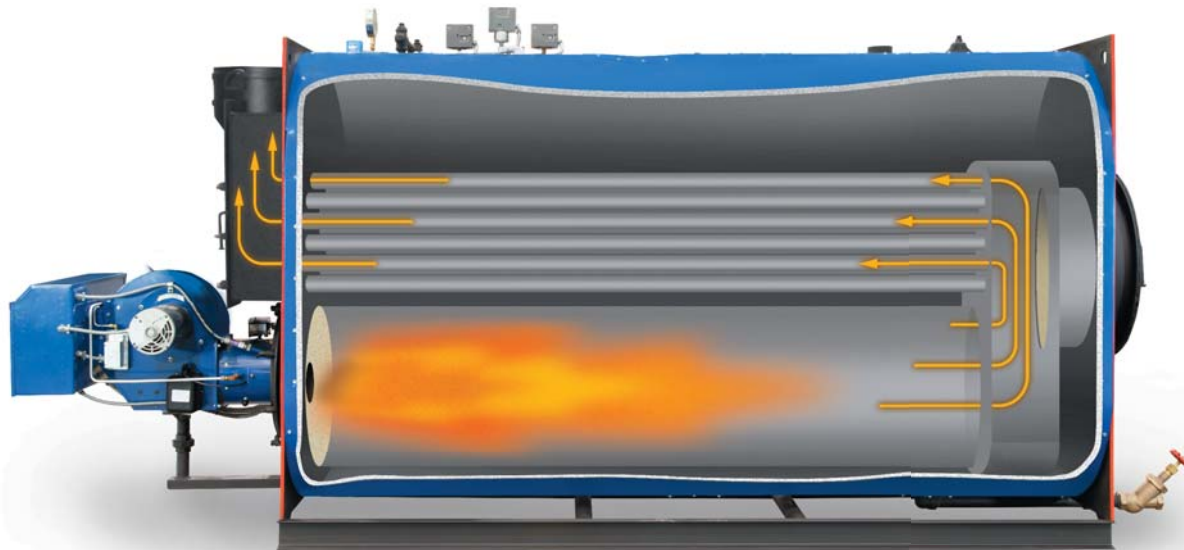
BOILER SPECIFICATIONS			30	40	50	60	70	80	90	100	125
BOILER HORSEPOWER											
STEAM OUTPUT	FROM & AT 212°F	LBS/HR	1035	1380	1725	2070	2415	2760	3105	3450	4313
GROSS OUTPUT		MBH	1004	1339	1674	2009	2343	2678	3013	3348	4184
FIRING RATE GAS	1,000 BTU CU./FT.	CFH	1260	1680	2100	2520	2940	3360	3780	4200	5250
FIRING RATE LIGHT OIL	140,000 BTU	GPH	9	12	15	18	21	24	26.9	30	37.4
A	WIDTH WITHOUT TRIM	IN	30	30	30	30	34	34	34	34.5	34.5
B	WIDTH WITH TRIM	IN	40	40	40	40	44	44	44	44	44
C	OVERALL WIDTH W/ GAS TRAIN & TRIM	IN	46	46	50	50	54	54	54	54	54
D	BOILER LENGTH	IN	77	77	85	85	92	92	92	115	115
E	OVERALL LENGTH W/ STD. BURNER	IN	120	124	133	133	140	145	145	170	170
F	HEIGHT WITHOUT TRIM	IN	62	62	66	66	68	68	68	70	70
G	HEIGHT WITH TRIM	IN	71	71	77.5	77.5	82.5	82.5	82.5	87	87
H	LENGTH OF SKID	IN	78	78	86	86	93	93	93	116	116
I	SUPPLY SIZE	IN	4	4	6	6	6	6	6	6	6
J	SUPPLY LOCATION	IN	38.5	38.5	42.5	42.5	46	46	46	50.5	50.5
K	RETURN SIZE	IN	4	4	4	4	4	4	4	4	4
L	RETURN LOCATION	IN	31.5	31.5	34	34	36.25	36.25	36.25	36.25	36.25
M	BOILER DRAIN SIZE	IN	1.25	1.25	1.25	1.25	1.5	1.5	1.5	1.5	1.5
N	STACK DIAMETER, O.D.	IN	10	10	12	12	12	12	12	14	14
O	STACK HEIGHT	IN	57	57	64	64	66	66	66	68	68
P	TO CENTER OF STACK	IN	7	7	8	8	8	8	8	9	9
Q	TUBE PULL SPACE	IN	72	72	80	80	86	86	86	108	108
	SHIPPING WEIGHT (NO BURNER OR TRIM PIPING)	LBS	3342	3562	3770	4010	4400	4620	4860	5200	5420
	WATER CONTENT - WATER	GAL.	291	291	376	376	443	443	443	538	538
	WATER CONTENT - STEAM	GAL.	228	228	306	306	360	360	360	430	430
	BOILER HORSEPOWER		30	40	50	60	70	80	90	100	125

- ALL DIMENSIONS ARE IN INCHES
- CERTIFIED DRAWING AVAILABLE UPON REQUEST.
- DIMENSIONS SUBJECT TO CHANGE WITHOUT NOTICE.

Inspected and registered with the National Board of Boiler & Pressure Vessel Inspectors.



Designed, constructed and stamped in accordance with the requirements of the ASME Boiler Codes.



Enhanced Fire Tubes

Heat Transferring Embossed Surface

Mechanically embossed spiral ribs on the inside of the tube not only provides increased surface area, but also leads to a complex gas flow with a boundary layer producing a separation/reattachment phenomenon. This reattachment action substantially improves heat transfer.

With this enhanced tube design, the heat transfer rate is 85% greater than a plain fire tube. Cost savings of up to 20% on the entire boiler package can be obtained with the use of enhanced spiral ribbed tubes.



Modified two-pass scotch marine boiler. Designed for minimal clearances where installation and floor space are the challenge. Durable features start with the thickest vessel shell in its class, along with large furnace volume for ultimate combustion efficiency.

BOILER DESIGN: Modified: *Thru-the-door* 2-Pass Scotch Marine Firetube design with stress relieving "HURST Wetback" construction.

Pressure designs available for steam and hot water are:

30-125 HP. 15 PSI max. (STEAM)

30-125 HP. 60 PSI max. (HOT WATER)

Section IV

Factory assembled with trim, tested, ASME code, UL, and CSD-1 standards.

STEAM MODEL TRIM: Safety relief valve, operating pressure control, high limit pressure control with manual reset, steam pressure gauge with syphon, combination pump control and low water cut-off with gauge glass assembly and drain valve, auxiliary low water cut-off with manual reset.

HOT WATER MODEL TRIM: Safety relief valve, operating temperature control, high limit temperature control with manual reset, combination pressure & temperature gauge, low water cut-off control with manual reset.

BURNER: Matched UL listed "forced draft" power burners with factory pre-piped, wired and tested fuel configurations for natural gas, propane (LP) gas, No. 2 (diesel) oil, or combination of both gas/oil.

WET BACK ADVANTAGE

Dry back boilers are subject to deteriorating rear refractory, leaking baffles, leaking door seals, and often found with a heat-stressed rear tube sheet. Fragile refractory baffling and door seals will require continuous monitoring, maintenance, and replacement, costing thousands of dollars in materials and specialized labor costs over the life of the boiler. In addition, broken baffles and leaking seals will short-circuit the boiler's gas flow, causing high stack temperatures and lowering efficiency until repairs can be made. This can bring your production process to a costly halt.

All of those frustrating problems have been designed out of the Hurst Series LPX Wet back. It has a full wet back radiant heat transfer area that promotes superior internal water circulation and rapid heat absorption, rear tube sheet, and allows tubes to expand and contract at its own rate without tube sheet stress. The only rear refractory is a manway plug which allows access to the furnace for inspection.



“Wet back design eliminates, costly deteriorating refractory rear doors.”

Stress Relieving

“Wet Back” Construction for Extended Life

Standard Steam Trim

- Operating & high limit pressure control
- Modulating pressure control (when appl.)
- Water column with gauge glass protector and drain valve
- Primary low water cut-off & pump control
- Probe Secondary low water cut-off w/ Manual Reset
- Steam pressure gauge, syphon & test cock
- Safety relief valve(s) per ASME Code

Standard Water Trim

- Operating & high limit temperature control
- Modulating temperature control (when appl.)
- Probe type low water cut-off control w/ Manual Reset
- Combination pressure & temperature gauge
- Hot water return baffle for shock resistance
- Safety relief valve(s) per ASME Code

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HURST BOILER & Welding Co., Inc.

100 Boilermaker Lane • Coolidge, GA 31738-0530
Tel: (229) 346-3545 • Fax: (229) 346-3874
email: info@hurstboiler.com