HURST

BOILER & WELDING CO., INC.

AVAILABLE WITH LOW NOX

HURST SERIES 250W

2-PASS SCOTCH MARINE DESIGN
with Wetback Construction

HIGH PRESSURE BOILER

Capacities From 20 to 2500 BHP.
670 to 83,688 MBTU/HR.
Up to 86,250 PPH Steam.

Shown with
STACKMASTER Option

STEAM

150 PSI.
Higher Pressures
Upon Request

HOT WATER

Section I & Section IV

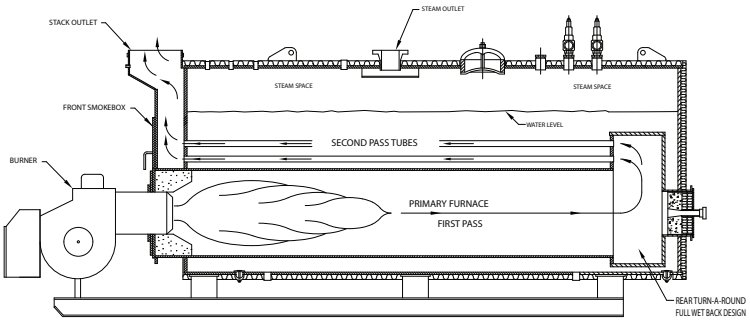
SKID MOUNTED
MODULAR PACKAGED

HURST PERFORMANCE SERIES BOILERS

SERIES 250W

Factory Assembled With Trim, Tested, ASME Code, UL, and CSD-1 Standards.

Shown with
STACKMASTER Option



Rifled Pattern
Enhanced Fire Tubes
Superior Heat Transfer Surface

HURST SERIES STACKMASTER

INTEGRATED ECONOMIZER
Factory Installed
Instant Energy Savings

The Hurst stack economizer is a waste heat recovery option, that scavages remaining heat from the exhaust gases and transfers it to the boiler's incoming make-up water. Essentially the waste heat is recovered to preheat the boiler's make-up water for far greater fuel efficiency.

BOILER SPECIFICATIONS

	BOILER HORSEPOWER			20	25	30	40	50	60	75	100	125	150	200	250	300	
	STEAM OUTPUT	FROM &@ 212°	LBS/HR	690	862	1035	1380	1725	2070	2586	3450	4312	5175	6900	8625	10350	
	GROSS OUTPUT		MBH	670	837	1004	1339	1675	2008	2511	3348	4184	5021	6695	8369	10042	
	FIRING RATE GAS	1,000 BTU/CF	CFH	840	1050	1260	1680	2100	2520	3150	4200	5250	6300	8400	10500	12600	
	FIRING RATE LP GAS	91,500 BTU	GPH	9.2	11.5	13.8	18.4	23	27.5	34.4	46	57	69	92	115	138	
	FIRING RATE OIL #2	140,000 BTU	GPH	6	7.5	9	12	15	18	22.5	29.9	37.4	45	60	75	90	
	FURNACE VOLUME TOTAL		CU.FT	10.8	10.8	10.8	20	20	20	41	41	41	81	86	90	158.5	
	FURNACE HEAT RELEASE	BTU/CU.FT.x1000		74.07	92.59	111.1	80	100	120	73.17	97.56	121.95	74.07	93.02	111.1	75.71	
A	*NOTE: 1 STEAM OUTLET SIZE	150 PSI	IN	1.5	1.5	1.5	1.5	2	2	2.5	4	4	4	4	6	6	A
A	*NOTE: 2 STEAM OUTLET SIZE	15 PSI	IN	3	3	4	4	4	6	6	8	8	8	8	10	10	A
B	*NOTE: 2 WATER SUPPLY SIZE	30 PSI	IN	3	3	3	3	4	4	6	6	6	8	8	10	10	B
C	*NOTE: 2 WATER RETURN SIZE	30 PSI	IN	2.5	2.5	3	3	4	4	4	6	6	6	6	8	8	C
D	FEEDWATER CONNECTION SIZE		IN	.75	.75	.75	1	1	1	1.25	1.25	1.25	1.5	1.5	1.5	2.0	D
E	BLOWDOWN CONNECTION (BTM)	HIGH PRESS.	IN	1	1	1	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.5	E
E	BLOWDOWN CONNECTION (BTM)	LOW PRESS. & HW	IN	1.25	1.25	1.25	1.25	1.25	1.5	1.5	1.5	1.5	1.5	2	2	2	E
F	SHELL I.D.		IN	38	38	38	44	44	44	52	52	52	64	64	64	78	F
G	FURNACE O.D.		IN	14	14	14	18	18	18	24	24	24	32	32	32	43	G
H	SHELL TO FLOOR HEIGHT		IN	12	12	12	12	12	12	15	15	15	15	15	15	14	H
I	C/LINE OF BOILER TO FLOOR		IN	31.3	31.3	31.3	34.3	34.3	34.3	41.3	41.3	41.3	47.38	47.38	47.38	53.5	I
J	C/LINE OF FURNACE TO FLOOR		IN	24.8	24.8	24.8	26.8	26.8	26.8	33	33	33	37.13	37.13	37.13	42.25	J
K	STACK HEIGHT		IN	56.63	56.63	56.63	62.63	62.63	62.63	73.63	73.63	73.63	85.75	85.75	85.75	99	K
L	STACK OUTLET O.DIA.		IN	8	10	10	12	12	12	14	14	14	18	18	18	24	L
M	SKID & SADDLE WIDTH		IN	32	32	32	36	36	36	40	40	40	52	52	52	62	M
N	SKID LENGTH		IN	120	120	120	132	132	132	150	150	150	180	194	204	219	N
O	WIDTH WITHOUT TRIM		IN	44	44	44	50	50	50	58	58	58	70	70	70	87	O
P	WIDTH WITH STD.CONTROLS		IN	51	51	51	57	57	57	64.3	64.3	64.3	77	77	77	95	P
Q	DIST.TO STM.&FD'WTR		IN	49.5	49.5	49.5	57.75	57.75	57.75	55.8	55.8	55.8	71.9	71.9	79.9	93.9	Q
R	OVER-ALL w/STD BURNER		IN	139	139	139	160	160	165	178	178	183	214	226	234	264	R
S	OVER-ALL WITHOUT BURNER		IN	133	133	133	144	144	144	166.3	166.3	166.3	197	209	220	233	S
T	FIRETUBE PULL-SPACE (MIN.)	FRONT	IN	78	78	78	96	96	96	102	102	102	131	144	152	163	T
	WATER CAPACITY	FLOODED	GALS	347	345	343	611	607	603	723	712	701	1290	1393	1454	2123	
	BLR.DRY SHIP WEIGHT	NO BURNER	LBS	3300	3350	3400	4800	4900	5000	6890	7150	7410	13375	14500	1 5250	22350	
	FLOODED WEIGHT	NO BURNER	LBS	6181	6214	6247	9871	9938	10005	12891	13059	13228	24082	26062	27318	39971	
	WATER CAP. NORM. OPERATING	STEAM	GAL'S	278	276	274	521	517	513	615	604	593	1021	1103	1149	1696	
	BOILER HORSEPOWER			**20**	**25**	**30**	**40**	**50**	**60**	**75**	**100**	**125**	**150**	**200**	**250**	**300**	

NOTE:1 3"& ABOVE ARE 300# ANSI FLANGE.
NOTE:2 4"& ABOVE ARE 150# ANSI FLANGE.
100 HP & LARGER HAVE TWO BOTTOM DRAIN CONNECTIONS.

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

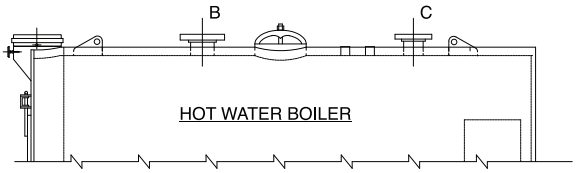
HURSTBOILER

PERFORMANCE ENGINEERED

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

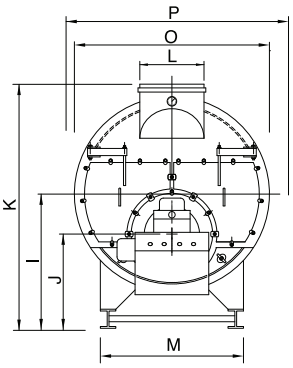
Inspected and registered with the National Board of Boiler & Pressure Vessel Inspectors.

Boiler Design:
2-Pass "Scotch Marine"
Firetube design with stress relieving
"Wetback" construction.

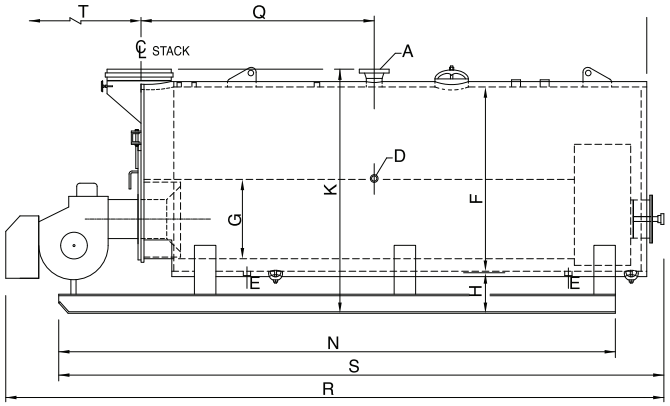


Pressure Designs Steam:
20-2500 HP. - 150 PSI
Higher pressures
upon request.

Pressure Designs Hot Water:
30-160 max psi.
High pressure, high temperature
Section I hot water
boilers available.



FRONT VIEW



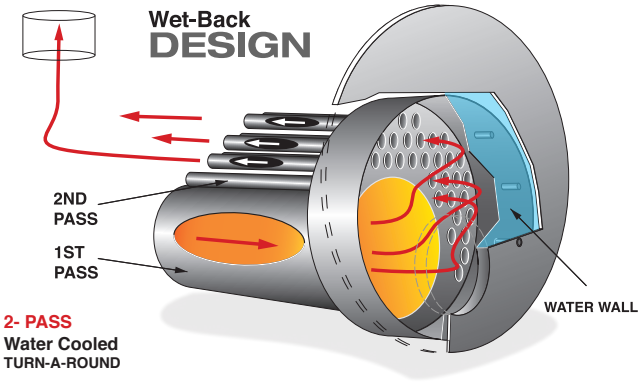
RIGHT SIDE VIEW

	350	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1800	2000	2250	2500	
	12075	13800	17250	20700	24150	27600	31050	34500	37950	41400	44850	48300	51750	55200	62100	69000	77625	86250	
	11716	13390	16738	20085	23432	26780	30128	33475	36823	40170	43518	46865	50215	53560	60255	66950	75319	83688	
	14700	16800	21000	25200	29400	33600	37800	42000	46200	50400	54600	58800	63000	67200	75600	84000	94500	105000	
	160	184	230	275	320	368	413	460	506	550	598	644	688	734	826	918	1033	1148	
	105	120	150	180	210	240	270	300	330	360	390	420	450	480	540	600	675	750	
	165	172	210	226	242	255	274	294	334	344	354	365	462	471	490	509	584	639	
	84.85	93.02	95.24	106.2	115.7	125.5	131.38	136.05	131.74	139.53	146.89	153.42	129.87	135.88	146.94	157.17	154.11	156.49	
A	6	6	6	8	8	8	10	10	10	10	10	10	12	12	12	12	14	14	A
A	10	10	10	12	12	12	14	14	14	14	14	14	14	14	14	16	16	16	A
B	10	10	10	12	12	12	12	12	14	14	14	14	14	14	14	16	16	16	B
C	8	8	8	10	10	10	12	12	12	14	14	14	14	14	14	16	16	16	C
D	2.0	2.0	2.0	2.0	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	D
E	1.5	1.5	1.5	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	E
E	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	E
F	78	78	84	84	90	90	96	96	106	106	106	106	120	120	120	120	130	130	F
G	43	43	48	48	50	50	52	52	56	56	56	56	62	62	62	62	66	66	G
H	14	14	15	15	16	16	16	16	16	16	16	16	16	16	16	16	16	16	H
I	53.5	53.5	57.5	57.5	61.5	61.5	64.5	64.5	69.5	69.5	69.5	69.5	76.63	76.63	76.63	76.63	81.75	81.75	I
J	42.25	42.25	45.25	45.25	47.5	47.5	48.75	48.75	50.75	50.75	50.75	50.75	54.38	54.38	54.38	54.38	57.88	57.88	J
K	99	99	106	106	113	113	119	119	129	129	129	129	144.25	144.25	144.25	144.25	154.38	154.38	K
L	24	24	26	28	28	28	32	32	36	36	36	36	40	40	40	40	48	48	L
M	62	62	66	66	72	72	80	80	88	88	88	88	102	102	102	102	108	108	M
N	226	236	242	258	260	272	266	284	282	290	298	306	312	318	330	342	354	384	N
O	87	87	92	92	100	100	104	104	114	114	114	114	129	129	129	129	137	137	O
P	95	95	98	98	106	106	112	112	121	121	121	121	139	139	139	139	152	152	P
Q	82.9	90.9	98.9	98.9	105	111	110	110	120	120	126	126	141	141	147	153	145	157	Q
R	268	277	280	296	294	306	308	326	**	**	**	**	**	**	**	**	**	**	R
S	242	252	258	280	277	289	283	301	299	307	315	323	330	335	347	359	372	402	S
T	172	181	178	194	194	206	201	219	216	224	232	240	244	250	262	274	275	306	T
	2237	2352	2258	2785	3343	3517	3911	4258	5225	5413	5572	5765	7185	7366	7813	8091	9449	10516	
	23200	24100	27500	28950	32100	33500	38400	40350	44900	46250	47600	48950	70050	71400	74100	76900	94700	103000	
	42514	43622	48731	52065	59847	62691	70861	75691	88267	91178	93848	96800	129686	132538	138948	144055	173127	190283	
	1788	1882	1999	2179	2393	2512	2915	3178	3556	3685	3785	3919	5174	5307	5657	5839	6724	7497	
	350	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500	1600	1800	2000	2250	2500	

** CONSULT FACTORY FOR BURNER SPEC'S
75 HP & LARGER HAS 12" X 16" MANWAY
20-60 HP HAVE 3X4 HAND HOLES IN SHELL

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

HURST PERFORMANCE SERIES BOILERS



WET BACK ADVANTAGE

Dry backs 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 250W Wet back. It has a full wet back radiant heat transfer area that promotes superior internal water circulation and rapid heat absorption. The 250W's 2-pass design allows the fire tubes to expand and contract at its own rate without tube-to-sheet stress. All fire tubes are mechanically rolled, flared and beaded, making any tube service a simple matter. The only rear refractory in this design is a manway plug which allows access to the furnace for service and annual inspection.

Standard Steam Trim

- Operating & high limit pressure control.
- Modulating pressure control.
- Water column with gauge glass, combination low water cut-off & pump control.
- Probe Aux, L.W.C.O. w/ Manual Reset.
- Steam pressure gauge, syphon & test cock.
- Stack Thermometer, Water column drain valve.
- Safety relief valve(s) per ASME Code.

Standard Water Trim

- Operating & high limit temperature control.
- Modulating temperature control.
- 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.
- Stack Thermometer.

:efficiency

FIREMASTER
INTEGRATED CONTROL SYSTEM

Integration has become essential for efficient operation and shared duty load. Hurst developed and offers a full line of processor based *smart* controls fully compatible with all Hurst designs including alternative fuel models. Precise control of fuel and combustion air can result in very high efficiencies. Hurst intelligence control systems allow you to harness these savings while increasing overall boiler plant productivity.

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Hurst BOILER & WELDING COMPANY, INC
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50 YEARS
more solutions