

AVAILABLE WITH LOW NOX

# SERIES 200

2-PASS SCOTCH MARINE DESIGN Full Rear Access

# HIGH PRESSURE BOILER

Capacities from 15 to 800 BHP. 502 to 26780 MBTU/HR.

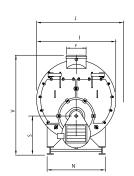


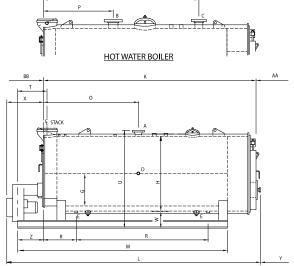
SKID MOUNTED MODULAR PACKAGED

HURST PERFORMANCE SERIES BOILERS

# SERIES 200





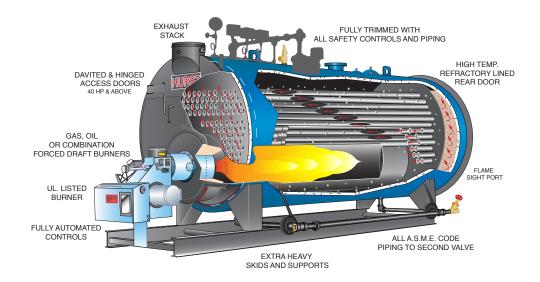


Inspected and registered with the National Board of Boiler & Pressure Vessel Inspectors.



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

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BOILER SPECIFICATIONS												
BOILER HORSEPOWER			15	20	25	30	40	50	60	70	80	100
HEATING SURFACE	FIRESIDE	SQ. FT.	75	100	125	150	200	250	300	350	400	500
STEAM OUTPUT	FROM &@ 212°F	LBS/HR	517	690	862	1035	1380	1725	2070	2415	2760	3450
GROSS OUTPUT		MBH	502	670	837	1004	1339	1675	2008	2343	2678	3348
FIRING RATE GAS	1,000 BTU	CFH	630	840	1050	1260	1680	2100	2520	2940	3360	4200
FIRING RATE LP GAS	91,500 BTU	GPH	6.9	9.2	11.5	13.8	18.4	23	27.5	32.1	36.7	45.9
FIRING RATE OIL #2	140,000 BTU	GPH	4.5	6	7.5	9	12	15	18	20.7	24	30
FIRING RATE OIL #5 & #6	150,000 BTU	GPH	4.2	5.6	7	8.4	11.2	14	16.8	19.3	22.4	28
*NOTE: 1 STEAM OUTLET SIZE	150 PSI	IN	1 1/4	1 1/4	1 1/4	1 1/2	1 1/2	2	2	2 1/2	2 1/2	3
*NOTE: 2 STEAM OUTLET SIZE	15 PSI	IN	2 1/2	3	3	4	4	4	6	6	6	6
*NOTE: 2 WATER SUPPLY SIZE	30 PSI	IN	2 1/2	3	3	3	4	4	4	6	6	6
*NOTE: 2 WATER RETURN SIZE	30 PSI	IN	2	2 1/2	3	3	3	4	4	4	4	6
FEEDWATER CONNECTION		IN	1	1	1	1	1	1	1	1 1/4	1 1/4	1 1/4
BLOWDOWN CONNECTION	воттом	IN	1	1	1	1	1 1/4	1 1/4	1 1/4	1 1/4	(2) 1 1/2	(2) 1 1/2
STACK OUTLET SIZE O.D.		IN	8	8	10	10	12	12	12	16	16	16
FURNACE O.D.		IN	16	16	18	18	20	20	20	24	24	24
SHELL I.D.		IN	36	36	42	42	48	48	48	54	54	54
WIDTH WITHOUT TRIM		IN	44	44	50	50	56	56	56	62	62	62
WIDTH WITH TRIM		IN	49	49	55	55	61	61	61	67	67	67
LENGTH, FRONT TO REAR		IN	71	86	78	89	99	119	135	115	127	151
LENGTH OVERALL		IN	106	121	113	124	134	154	170	150	162	188
SKID LENGTH		IN	72	90	84	96	102	120	138	117	132	150
SKID WIDTH		IN	30	30	36	36	40	40	40	44	44	44
STEAM SUPPLY LOCATION		IN	29	26	30	35	40	48	48	50	50	65
WATER SUPPLY LOCATION		IN	18	24	23	27	30	30	36	31	37	37
WATER RETURN LOCATION		IN	45	56	51	59	68	84	90	78	88	103
BLOWDOWN LOCATION	15 PSI AND UP	IN	20	20	18	18	23	23	23	23	23-66	23-89
SURFACE BLOW-OFF CONNECTION	15 F31 AND OF	IN	23 9/16	23 9/16	24 9/16	24 9/16	25 13/16	25 13/16	25 13/16	29 9/16	29 9/16	29 9/16
STACK OUTLET LOCATION		IN	23 9/16	25 9/16	24 9/16	24 9/16	25 13/16	23 13/16	25 13/16	29 9/16	29 9/16	29 9/16
SUPPLY HEIGHT		IN	51	51	57	57	63	63	63	72	72	75
STACK HEIGHT		IN	54.63	54.63	60.63	60.63	66.63	66.63	66.63	75	75	75
SHELL TO FLOOR HEIGHT		IN	12	12	12	12	12	12	12	14	14	14
BURNER PROJECTION		IN	32	32	32	32	32	32	32	32	32	34
DOOR SWING		IN	22	22	25	25	28	28	28	31	31	31
SKID TO FRONT PLATE		IN	19.25	23.25	24.25	25.25	23.25	21.25	23.25	26.25	29.25	23.25
TUBE REMOVAL	REAR	IN	40	55	47	58	64	84	100	76	88	112
TUBE REMOVAL	FRONT	IN	47	62	54	65	71	91	107	83	95	119
WATER CAPACITY - STEAM SERIES	NWL	GALS	123	165	193	233	330	425	511	436	510	628
WATER CAPACITY - WATER SERIES	FLOODED	GALS	146	195	225	271	383	493	582	528	606	761
SHIPPING WEIGHT - HIGH PRESS.	DRY	LBS	2975	3225	3850	4125	6100	7375	8250	9400	10300	12450
SHIPPING WEIGHT - LOW PRESS.	DRY	LBS	2850	3075	3650	3450	5750	6950	7550	8100	9300	11100
BOILER HORSEPOWER			15	20	25	30	40	50	60	70	80	100



	125	150	200	250	300	350	400	500	600	700	800	
	625	750	1000	1250	1500	1750	2000	2500	3000	3500	4000	
	4312	5175	6900	8625	10350	12075	13800	17250	20700	24150	27600	
	4184	5021	6695	8369	10042	11716	13390	16738	20085	23432	26780	
	5250	6300	8400	10500	12600	14700	16800	21000	25200	29400	33600	
	57.3	68.8	91.8	114.7	137.7	160.6	183.6	229.5	275.4	321	367	
	37.5	45	60	75	90	105	120	150	180	210	240	
	35	42	56	70	84	98	112	140	168	196	224	
Α	4	4	4	6	6	6	6	8	8	8	8	Α
Α	8	8	8	10	10	10	12	12	12	12	12	Α
В	6	8	8	8	10	10	10	12	12	12	12	В
С	6	6	6	6	8	10	10	10	10	12	12	С
D	1 1/2	1 1/2	2	2	2	2	2	2	2 1/2	2 1/2	2 1/2	D
Е	(2) 1 1/2	(2) 1 1/2	(2) 2	(2) 2	(2) 2	(2) 2	(2) 2	(2) 2	(2) 2	(2) 2	(2) 2	Е
F	16	16	20	20	20	24	24	24	26	26	30	F
G	26	26	34	34	34	42	42	42	48	48	48	G
Н	60	60	75.5	75.5	75.5	90	90	90	102	102	102	н
1	68.5	68.5	84.5	84.5	84.5	99	99	99	111	111	111	1
J	73	73	93	93	93	103	103	103	116	116	116	J
K	175	195	163	194	215	177	187	223	239	271	307	K
L	214	234	209	240	261	224	235	268	310	342	380	L
M	174	198	168	192	216	168	180	220	240	282	318	M
Ν	48	48	60	60	60	70	70	70	78	78	78	N
0	69	82	57.87	82.87	94	75	77	100	86 7/8	98 7/8	98 7/8	0
Р	48	48	37	48	53	39	48	54	60	64 7/8	64 7/8	Р
Q	120	132	115	138	161	117	132	162	174	192 7/8	226 7/8	Q
R	25-112	26-130	25-94	27 - 125	31-135	30-99	28-108	27-144	39-142	39-174	39-206	R
s	31 7/8	31 7/8	36 1/2	36 1/2	36 1/2	43.13	43.13	43.13	46	46	46	s
T	25	29	34	27	30	25	25	29	38	48	50	Т
U	82	82	98	98	98	115	115	115	127	127	127	U
٧	82	82	99	99	99	116	116	116	128	128	128	٧
W	15	15	15	15	15	18	18	18	18	18	18	W
X	35	35	43	43	43	43	43	40	67	67	69	Х
Υ	34	34	43	43	43	50	50	50	57	57	57	Υ
Z	23.25	27.25	34.13	27.12	30.12	25.125	27.125	31.125	36.125	46.125	34.125	Z
AA	131	151	117	148	169	124	135	171	181	213	245	AA
ВВ	141	161	124	155	176	131	143	179	189	221	253	ВВ
	1000	1142	1274	1552	1764	1684	1872	2300	2938	3439	3941	
	1160	1326	1547	1895	2153	2133	2364	2915	4071	4766	5461	
	15000	16500	17900	25700	28000	32000	33900	39900	47000	54300	58000	
	14350	15800	16500	23900	25250	31000	33000	38800	47000	54300	58000	
	125	150	200	250	300	350	400	500	600	700	800	

**BOILER DESIGN**: Two-Pass Dry-Back design. Pressure designs for steam are 15-300 psi. 100-600 hp. 250 psi. max. for 700-1500 hp. and 200 psi. max. for 1800-2000 hp.

**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 prepiped, wired and tested fuel configurations for natural gas, propane (LP) gas, No. 2 (diesel) oil, or combination of both gas/oil.

### **HURST PERFORMANCE SERIES BOILERS**

#### STANDARD FEATURES

- Boiler is of the two-pass, scotch type, built and stamped in accordance with the requirements of the ASME Code, and listed by the National Board of Boilers and Pressure Vessel Inspectors.
- Large combustion chamber with low heat release for complete combustion.
- Smoke box is front-mounted with slip-on stack connector.
- Access to fireside is accomplished with hinged and davit rear door and with split front doors. Flame observation ports are on front and rear.
- Openings for clean-out inspection of waterside are provided with 3" x 4" hand holes, and with 12" x 16"manholes (80 HP up).
- Insulated with 2" high-density mineral wool, lagged with 22 gauge grip jacketing, baked on epoxy enamel to resist chipping and fading.
- Firetubes are rolled and beaded on power boilers, expanded and flared on low pressure boilers.
- Supports include lifting lugs securely welded to the top of shell; structural steel support legs on skids support the boiler so that special foundations are not required.

#### Minimum Maintenance with Rigged Construction for Extra-Long Life

#### Standard Steam Trim

- Operating & High Limit pressure control
- Modulating pressure control (when appl.)
- Water column with gauge glass, combination low water cut-off & pump control
- L.W.C.O. Control w/ 2nd AUX Probe Steam pressure gauge, syphon & test cock
- Water column drain valve
- 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
- Combination pressure, temperature, altitude 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