

HURST

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 davited rear door and with split front doors. Flame observation ports are on front and rear.
- Openings for cleanout 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
- 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 (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
- Stack Thermometer

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 **hurstboiler.com**

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HURST

BOILER & WELDING CO., INC

AVAILABLE WITH LOW NOX

SERIES 300

**3-PASS SCOTCH MARINE DESIGN
with Dryback Construction**

STEAM
Pressures to 15-500 PSI.

HOT WATER
Section I and Section IV

High PRESSURE BOILER.
Capacities From 15 to 800 BHP.
502 to 26780 MBTU/HR.

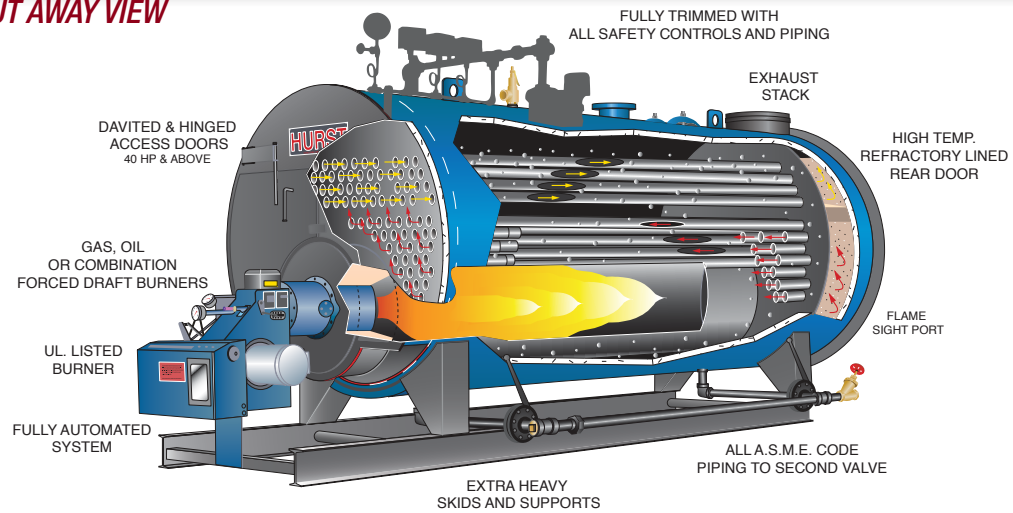


**SKID MOUNTED
MODULAR PACKAGED**

Large Furnace Volume
Superior Heavy-Fuel-Oil Combustion

HURST PERFORMANCE SERIES BOILERS

CUT AWAY VIEW

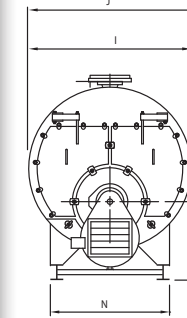


Inspected and registered with the National Board of Boiler & Pressure Vessel Inspectors.

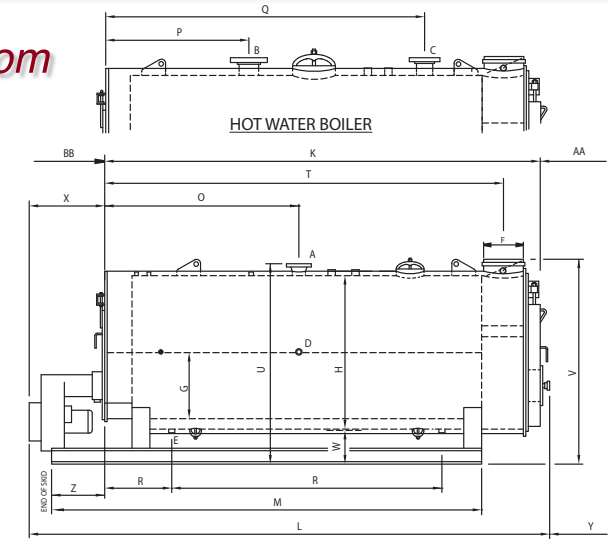


Designed, constructed and stamped in accordance with the requirements of the ASME Boiler Codes.

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FRONT VIEW



RIGHT SIDE VIEW

BOILER SPECIFICATIONS

BOILER HORSEPOWER			15	20	25	30	40	50	60	70	80	100	125
HEATING SURFACE	FIRESIDE	SQ. FT.	75	100	125	150	200	250	300	350	400	500	625
STEAM OUTPUT	FROM & @ 212°	LBS/HR	517	690	862	1035	1380	1725	2070	2415	2760	3450	4312
GROSS OUTPUT		MBH	502	670	837	1004	1339	1675	2008	2343	2678	3348	4184
FIRING RATE GAS	1,000 BTU/CF	CFH	630	840	1050	1260	1680	2100	2520	2940	3360	4200	5250
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	57.3
FIRING RATE OIL #2	140,000 BTU	GPH	4.5	6	7.5	9	12	15	18	20.7	24	30	37.5
FIRING RATE OIL, HEAVY OIL	150,000 BTU	GPH	4.2	5.6	7	8.4	11.2	14	16.8	19.3	22.4	28	35
A	*NOTE: 1 STEAM OUTLET SIZE	150 PSI	IN	1.25	1.25	1.25	1.5	1.5	2	2	2.5	2.5	3
A	*NOTE: 2 STEAM OUTLET SIZE	15 PSI	IN	2.5	3	3	4	4	4	6	6	6	8
B	*NOTE: 2 WATER SUPPLY SIZE	30 PSI	IN	2.5	3	3	3	4	4	4	6	6	6
C	*NOTE: 2 WATER RETURN SIZE	30 PSI	IN	2	2.5	3	3	3	4	4	4	6	6
D	FEEDWATER CONNECTION SIZE		IN	1	1	1	1	1	1	1.25	1.25	1.25	1.5
E	BLOWDOWN CONNECTION (BTM)		IN	1	1	1	1	1.25	1.25	1.25	(2)1.5	(2)1.5	(2)1.5
F	STACK OUTLET SIZE O.D.		IN	8	8	10	10	12	12	16	16	16	16
G	FURNACE O.D.		IN	16	16	18	18	20	20	24	24	24	26
H	SHELL I.D.		IN	36	36	42	42	48	48	54	54	54	60
I	WIDTH WITHOUT TRIM		IN	44	44	50	50	56.5	56.5	62	62	62	68.5
J	WIDTH WITH TRIM		IN	49	49	55	55	61	61	67	67	67	73
K	LENGTH, FRONT TO REAR		IN	71	86	78	89	99	119	135	115	127	175
L	LENGTH OVERALL		IN	106	121	113	124	134	154	170	150	162	214
M	SKID LENGTH		IN	72	90	84	96	102	120	138	117	132	150
N	SKID WIDTH		IN	30	30	36	36	40	40	44	44	44	48
O	STEAM SUPPLY LOCATION		IN	29	26	30	35	40	48	48	50	50	65
P	WATER SUPPLY LOCATION		IN	18	24	23	27	30	30	36	31	37	48
Q	WATER RETURN LOCATION		IN	45	56	51	59	68	84	90	78	88	103
R	BLOWDOWN LOCATION		IN	20	20	18	18	23	23	23	23-66	23-89	25-112
S	C / LINE OF FURNACE TO FLOOR		IN	23.5625	23.5625	24.5625	24.5625	25.8125	25.8125	25.8125	29.5625	29.5625	31.875
T	STACK OUTLET LOCATION		IN	58	73	66	77	86	106	122	99.75	111.75	135.75
U	SUPPLY HEIGHT		IN	51	51	57	57	63	63	63	72	72	74.63
V	STACK HEIGHT		IN	54.625	54.625	60.625	60.625	68.63	68.63	68.63	74.63	74.63	81.75
W	SHELL TO FLOOR HEIGHT		IN	12	12	12	12	12	12	14	14	14	15
X	BURNER PROJECTION	STND. BURNER	IN	32	32	32	32	32	32	32	32	34	35
Y	DOOR SWING		IN	22	22	25	25	28	28	31	31	31	34
Z	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
AA	TUBE REMOVAL, REAR		IN	40	55	47	58	64	84	100	76	88	112
BB	TUBE REMOVAL, FRONT		IN	47	62	54	65	71	91	107	83	95	119
	WATER CAPACITY, STEAM	NWL	GALS	123	165	193	233	330	425	511	436	510	1000
	WATER CAPACITY, HOT WATER	FLOODED	GALS	146	195	225	271	383	493	582	528	606	1160
	APPROX. SHIPPING WEIGHT	150 PSI	LBS	2975	3225	3850	4125	6100	7375	8250	9400	10300	15000
	APPROX. SHIPPING WEIGHT	15 & 30 PSI	LBS	2850	3075	3650	3450	5750	6950	7550	8100	9300	14350
	BOILER HORSEPOWER			15	20	25	30	40	50	60	70	80	100

NOTE:1 3" & ABOVE ARE 300# ANSI FLANGE.
NOTE:2 4" & ABOVE ARE 150# ANSI FLANGE.
NOTE: DIM. X & L ARE DEPENDENT ON SPECIFIC BURNER USED

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

	150	200	250	300	350	400	500	600	700	800
A	4	4	6	6	6	6	8	8	8	8
A	8	8	10	10	10	12	12	12	12	12
B	8	8	8	10	10	10	12	12	12	12
C	6	6	6	8	10	10	10	10	12	12
D	1.5	2	2	2	2	2	2	2.5	2.5	2.5
E	(2)1.5	(2)2	(2)2	(2)2	(2)2	(2)2	(2)2	(2)2	(2)2	(2)2
F	16	20	20	20	24	24	24	26	26	30
G	26	34	34	34	42	42	42	48	48	48
H	60	75.5	75.5	75.5	90	90	90	102	102	102
I	68.5	84.5	84.5	84.5	99	99	99	111	111	111
J	73	93	93	93	103	103	103	116	116	116
K	195	163	194	215	177	187	223	239	271	307
L	234	209	240	261	224	235	268	310	342	380
M	198	168	192	216	168	180	220	240	282	318
N	48	60	60	60	70	70	70	78	78	78
O	82	57.87	82.87	94	75	77	100	86.875	98.875	98.875
P	48	37	48	53	39	48	54	60	64.875	64.875
Q	132	115	138	161	117	132	162	174	192.875	226.875
R	26-130	25-94	27-125	31-135	30-99	28-108	27-144	39-142	39-174	39-206
S	31.875	36.5	36.5	36.5	43.13	43.13	43.13	46	46	46
T	180	143.88	177.88	196.88	153.88	165.88	201.88	217.88	249.88	283.88
U	81.75	98.5	98.5	98.5	115	115	115	127	127	127
V	81.75	98.5	98.5	98.5	116	116	116	128	128	128
W	15	15	15	15	18	18	18	18	18	18
X	35	43	43	43	43	43	43	67	67	69
Y	34	43	43	43	50	50	50	57	57	57
Z	27.25	34.13	27.12	30.12	25.125	27.125	31.125	36.125	46.125	34.125
AA	151	117	148	169	124	135	171	181	213	245
BB	161	124	155	176	131	143	179	189	221	253
	1142	1274	1552	1764	1684	1872	2300	2938	3439	3941
	1326	1547	1895	2153	2133	2364	2915	4071	4766	5461
	16500	17900	25700	28000	32000	33900	39900	47000	54300	58000
	15800	16500	23900	25250	31000	33000	38800	47000	54300	58000
	15	20	25	30	40	50	60	70	80	100

BOILER DESIGN: Three-Pass "Scotch Marine" Firetube design with "SureSeal" Dryback construction. Pressure designs for steam are: 15-60 HP. > 500 PSI max. 200-300 HP. > 450 PSI max. 350-500 HP. > 375 PSI max. 600-800 HP. > 325 PSI max. Hot Water pressures models are from 30-160 psi. High pressure, high temperature Section I hot water boilers available. 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, oil, or combination of both gas/oil.