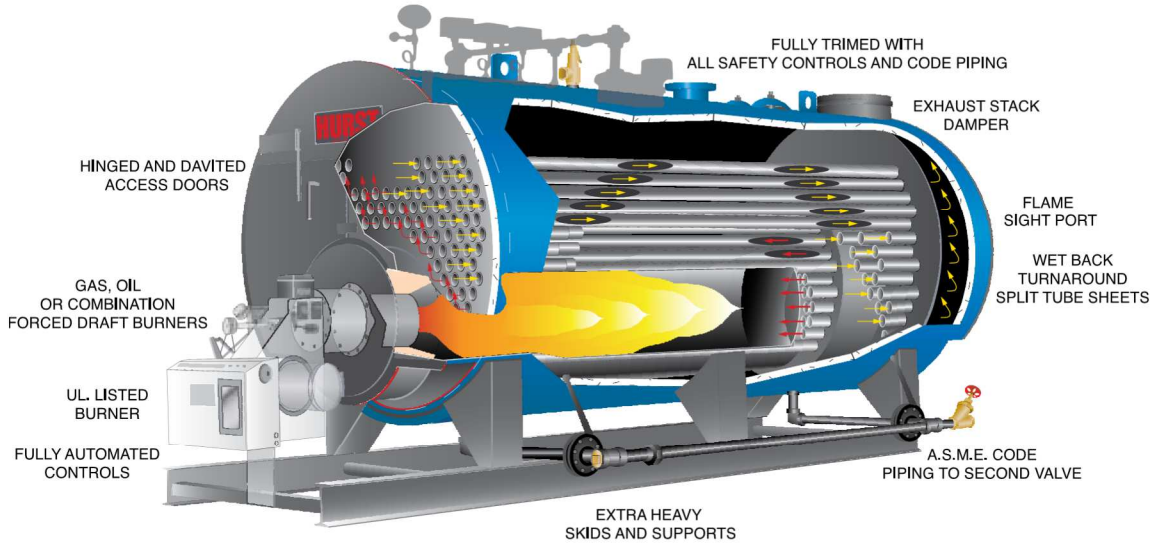
SERIES 400



BOILER SPECIFICATIONS

SEMI WET BACK

	BOILER HORSEPOWER			30	40	50	60	70	80	100	125	150	200	250	
	HEATING SURFACE	FIRESIDE	SQ. FT.	150	200	250	300	350	400	500	625	750	1000	1250	
	STEAM OUTPUT	FROM &@ 212°	LBS/HR	1035	1380	1725	2070	2415	2760	3450	4313	5175	6900	8625	
	GROSS OUTPUT		MBH	1004	1339	1674	2009	2343	2678	3348	4184	5021	6695	8369	
	FIRING RATE GAS	1,000 BTU/CF	CFH	1260	1680	2100	2520	2940	3360	4200	5250	6300	8400	10500	
	FIRING RATE LP GAS	91,500 BTU	GPH	13.8	18.4	23	27.5	32	36.7	46	57	69	92	115	
	FIRING RATE OIL #2	140,000 BTU	GPH	9	12	15	18	21	24	29.9	37.4	45	60	75	
	FIRING RATE OIL #5 & #6	150,000 BTU	GPH	8.4	11.2	14	16.8	19.6	22.4	28	35	42	56	70	
A	*NOTE: 1 STEAM OUTLET SIZE	150 PSI	IN	1 1/2	2	2 1/2	2 1/2	3	3	4	4	4	4	6	A
AA	*NOTE: 2 STEAM OUTLET SIZE	15 PSI	IN	4	4	4	6	6	6	8	8	8	8	10	AA
B	*NOTE: 2 WATER SUPPLY SIZE	30 PSI	IN	4	4	4	6	6	6	8	8	8	8	10	B
C	*NOTE: 2 WATER RETURN SIZE	30 PSI	IN	4	4	4	4	4	4	6	6	6	6	8	C
D	FEEDWATER CONNECTION SIZE		IN	3/4	3/4	3/4	1	1	1 1/4	1 1/4	1 1/4	1 1/4	1 1/2	1 1/2	D
E	BLOWDOWN CONNECTION (BTM)	HIGH PRESS.	IN	1	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4	E
EE	BLOWDOWN CONNECTION (BTM)	LOW PRESS. & HW	IN	1 1/4	1 1/4	1 1/4	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	2	2	EE
F	STACK OUTLET SIZE O.D.		IN	10	10	10	12	12	12	14	14	16	16	18	F
G	FURNACE O.D.		IN	14	14	16	18	18	18	22	26	26	30	32	G
H	SHELL I.D.		IN	40	40	44	48	48	48	54	60	60	66	72	H
I	SUPPLY HEIGHT		IN	55 1/4	55 3/8	59 3/4	63 3/4	66 5/8	66 5/8	74 5/8	81 3/4	81 3/4	90 3/4	93 3/4	I
J	WIDTH WITHOUT TRIM		IN	46	46	50	54 5/8	54 5/8	54 5/8	60	66 1/2	66 1/2	72 1/2	78 1/2	J
K	WIDTH WITH TRIM		IN	58	58	60	66	66	66	72	79	79	84	92	K
L	SKID WIDTH		IN	34	34	36	40	40	40	44	48	48	51	57	L
M	END OF SKID FROM FRT. PLATE		IN	13 1/2	14 1/2	15 1/4	15 1/4	15 1/4	15 1/4	21 3/4	25 1/8	25 1/8	23 1/4	28 5/8	M
N	SHELL TO FLOOR		IN	12	12	12	12	12	12	14	15	15	18	15	N
O	SKID LENGTH		IN	81	99	102	102	102	114	114	132	156	168	180	O
P	STACK OUTLET HEIGHT		IN	58 5/8	58 5/8	62 5/8	66 5/8	66 5/8	66 5/8	74 5/8	81 3/4	81 3/4	90 3/4	93 3/4	P
Q	BLOWDOWN LOCATION		IN	35 3/4	41	31 3/4	29 3/4	29 3/4	29 3/4	29 3/4-50	32 7/8-56	32 7/8-80	31 7/8-98	33 7/8-98	Q
R	STEAM OUTLET LOCATION	15 PSI & UP	IN	38 3/8	41 3/4	40 1/4	49 3/4	49 3/4	58 3/4	55 34	55 7/8	73 7/8	78 3/8	70	R
S	SUPPLY LOCATION		IN	20 1/4	20 1/4	33 1/4	37 3/4	37 3/4	43 3/4	32 3/4	32	32	44 38	49 7/8	S
T	RETURN LOCATION		IN	59 1/4	74 1/4	78 1/4	85 3/4	85 3/4	97 3/4	90 3/4	102	114	128 3/8	139 7/8	T
U	BURNER PROJECTION	STND. BURNER	IN	32	36	36	36	36	40.5	40.5	45	45	45	45	U
V	TUBE REMOVAL	FRONT	IN	68	85	88	91	91	102	96	108	132	150	152	V
W	STACK OUTLET LOCATION		IN	78 1/2	95 3/4	98 3/4	104 3/4	104 3/4	116 3/4	111 3/4	123 7/8	148 7/8	166 13/16	170 7/8	W
X	APPROX. OVERALL LENGTH		IN	118	139	142	149	149	167	163	179	205	223	229	X
Y	CENTER LINE OF FURNACE	TO FLOOR	IN	27 5/16	27 5/16	28 13/16	31 5/16	31 5/16	31 5/16	29 13/16	33 3/4	33 3/4	38 3/8	35 3/8	Y
	APPROX. SHIPPING WEIGHT	150 PSI	LBS	3500	4100	4700	6450	6700	7150	8200	10400	11800	16600	18750	
	APPROX. SHIPPING WEIGHT.	15 & 30 PSI	LBS	3400	4000	4500	5665	5900	6200	7200	9400	10800	13700	17750	
	WATER CAPACITY - STEAM	NWL	GALS	215	272	324	389	371	429	482	681	848	1126	1412	
	WATER CAPACITY - WATER	FLOODED	GALS	252	320	382	445	427	492	564	793	985	1350	1633	
	BOILER HORSEPOWER			**30**	**40**	**50**	**60**	**70**	**80**	**100**	**125**	**150**	**200**	**250**	

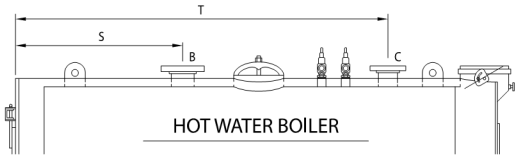
NOTE:1 3"& ABOVE ARE 300# ANSI FLANGE.
NOTE:2 4" & ABOVE ARE 150# ANSI FLANGE.
NOTE: 100 HP & LARGER HAS 12" X 16" MANWAY

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

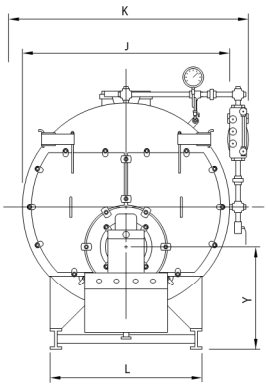
Inspected and registered with the National Board of Boiler & Pressure Vessel Inspectors.

hurstboiler.com

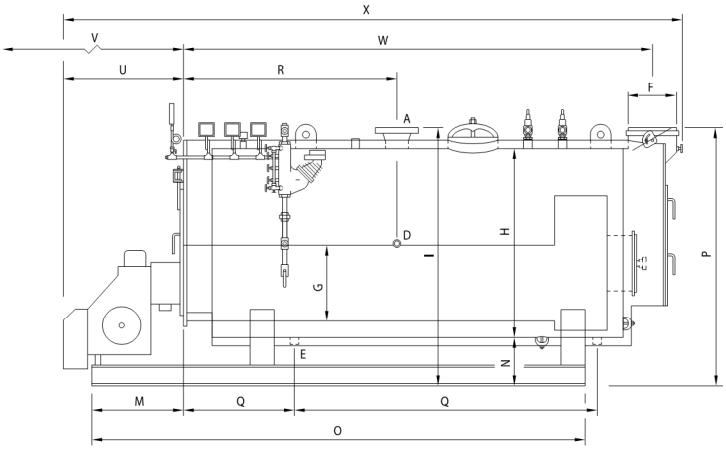
Designed, constructed and stamped in accordance with the requirements of the ASME Boiler Codes.



HOT WATER BOILER



FRONT VIEW



STEAM BOILER

	300	350	400	500	600	700	750	800	900	1000	1200	1500	
	1500	1750	2000	2500	3000	3500	3750	4000	4500	5000	6000	7500	
	10350	12075	13800	17250	20700	24150	25875	27600	31050	34500	41400	51750	
	10043	11716	13390	16738	20085	23432	25106	26780	30128	33475	40170	50213	
	12600	14700	16800	21000	25200	29400	31500	33600	37800	42000	50400	63000	
	138	160	184	230	275	320	344	368	413	460	550	688	
	90	105	120	150	180	210	225	240	2770	300	360	450	
	84	98	112	140	168	196	210	224	252	280	336	420	
A	6	6	6	6	8	8	8	8	8	8	10	10	A
A	10	10	10	10	12	12	12	12	14	14	14	14	A
B	10	10	10	10	12	12	12	12	12	12	14	14	B
C	8	8	8	8	8	10	10	10	12	12	14	14	C
D	2	2	2	2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	2 1/2	D
E	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	2	2	2	2	2	2	2	E
E	2	2	2	2	2	2	2	2	2	2	2	2	E
F	20	20	24	24	28	28	28	30	30	30	32	32	F
G	34	34	38	38	44	52	52	52	52	52	56	56	G
H	84	84	90	96	102	112	112	112	112	112	126	136	H
I	108 3/4	108 3/4	115	121	127	137 1/4	137 1/4	137 1/4	137 1/4	137 1/4	152 1/4	162 1/2	I
J	90 3/4	90 3/4	96 1/4	102 3/4	108 3/4	119	119	119	119	119	133 1/2	144	J
K	103	103	109	115	121	136	136	136	136	136	153	165	K
L	64	64	70	76	78	92	92	92	92	92	108	114	L
M	30 5/8	35 5/8	32 5/8	32 5/8	52 5/8	35 1/8	34 5/8	36 5/8	49 5/8	49 5/8	55 5/8	59 1/2	M
N	18	18	18	18	18	18	18	18	18	18	18	18	N
O	180	204	198	212	240	207	218	228	264	288	294	320	O
P	108 3/4	108 3/4	115	122	138 1/4	138 1/4	138 1/4	138 1/4	138 1/4	138 1/4	152 1/4	162 1/2	P
Q	33 7/8-98	39 7/8-110	45 7/8-98	47 7/8-137	46 7/8-137	51 3/8-124	49 7/8-138	49 7/8-148	45 7/8-170	49 7/8-193	53 7/8-189	52 7/8-214	Q
R	69 3/8	82 7/8	91 3/8	96 7/8	96 3/8	90 3/8	90 3/8	101 3/8	122	115 7/8	122 3/8	135 7/8	R
S	50 3/8	53 7/8	55 7/8	58 7/8	60	51 3/8	51 3/8	51 3/8	78	78	74 7/8	65 7/8	S
T	140 3/8	148 7/8	139 7/8	160 7/8	160	140 3/8	140 3/8	153 3/8	180	200	205 7/8	245 7/8	T
U	46	48	54	57	62	62	62	62	67	67	83	83	U
V	150	168	168	184	191	173	184	195	217	239	239	264	V
W	188 7/8	190 7/8	190 7/8	208 7/8	217 5/8	202 3/8	213 7/8	225 7/8	247 7/8	269 7/8	270 7/8	298 7/8	W
X	230	250	260	281	297	282	293	311	311	355	373	401	X
Y	41	41	43 1/2	44 1/4	47 1/2	50 1/4	50 1/4	50 1/4	50 1/4	50 1/4	52 5/8	53	Y
	27100	30200	22000	37900	46400	48100	54100	57200	61300	66400	82000	103000	
	25800	28200	29500	34400	37400	40100	42500	44900	44700	54600	74000	93000	
	1773	2009	2230	2918	3193	3121	3347	3562	3996	4425	5459	6927	
	2176	2461	2790	3627	4058	4043	4330	4605	5157	5706	7568	10205	
	300	350	400	500	600	700	750	800	900	1000	1200	1500	

BOILER DESIGN: Three-Pass "Scotch Marine" Firetube design with stress relieving "Wetback" construction. Pressure designs for steam are:
30-150 HP. > 450 PSI max.
200-300 HP. > 400 PSI max.
400-500 HP. > 350 PSI max.
500-600 HP. > 325 PSI max.
700-1000 HP. > 300 PSI max.
1200-1500 HP. > 250 PSI max.
1600-2000 HP. > 200 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 prepiped, wired and tested fuel configurations for natural gas, propane (LP) gas, No. 2 (diesel) oil, or combination of both gas/oil.