

Powermaster Series SWB

Three pass Semi-Wet-Back Steam Boilers



Boiler Data Sheet

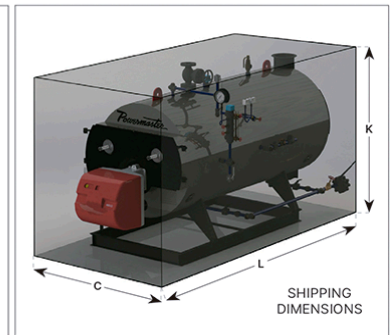
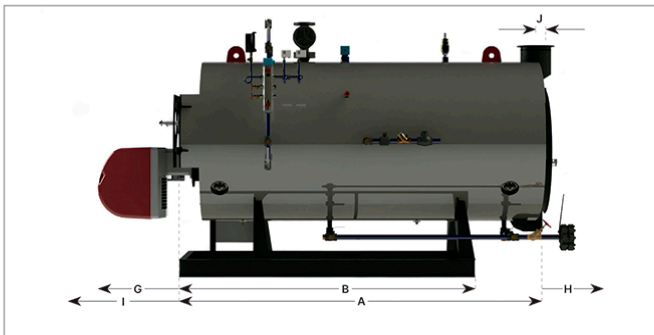
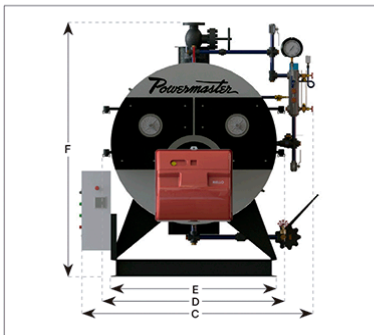
MODEL BHP

Maximum allowable working pressure 200 psig

NOMINAL CAPACITIES		10	15	20	25	30	40	50	60
Steam generation from and at 212 °F & 1 atm.	lb/hr	345	518	690	863	1,035	1,380	1,725	2,070
Heating Surface	SQFT	50	75	100	125	150	200	250	300
Boiler Output	MBH	335	502	670	837	1,004	1,339	1,674	2,009

FIRING RATE FOR BURNER SELECTION*		10	15	20	25	30	40	50	60
No. 2 Oil - Diesel (140,000 BTU/gal)	gal/hr	3.0	4.5	6.0	7.5	9.0	12.0	14.9	17.9
Natural Gas (1,000 BTU/ft3)	ft3/hr	4.18	6.28	8.37	1,046	1,255	1,674	2,092	2,511
LP Gas (91,500 BTU/gal)	gal/hr	4.6	6.9	9.1	11.4	13.7	18.3	22.9	27.4

WEIGHTS		10	15	20	25	30	40	50	60
Empty Boiler	lb	3,232	3,296	3,979	4,094	5,408	6,085	7,053	7,696
Flooded Boiler	lb	5,128	5,159	6,609	6,667	8,572	9,661	11,848	12,935



DIMENSIONS		10	15	20	25	30	40	50	60
A	Boiler Length	6.20	6.20	7.32	7.32	7.48	8.43	9.32	10.20
B	Base Length	4.89	4.89	5.28	5.28	5.51	6.76	7.41	8.17
C	Total Width	5.51	5.51	5.71	5.71	6.23	6.23	6.50	6.50
D	Limit Width**	3.67	3.67	3.87	3.87	4.89	4.89	5.18	5.18
E	Base Width	3.67	3.67	3.87	3.87	4.40	4.40	4.69	4.69
F	Total Height (to steam outlet)	5.61	5.64	5.84	5.87	6.36	6.46	6.76	6.36
G	Front access clearance for maintenance	1.84	1.84	1.94	1.94	2.20	2.20	2.33	2.33
H	Back access clearance for maintenance	2.99	3.08	3.25	3.25	3.67	3.67	3.84	3.84
I	Front flux tubes exchange clearance	4.92	4.92	6.04	6.04	5.81	6.76	7.38	8.23
J	Smoke stack center to back of boiler	-0.13	-0.07	-0.07	-0.03	-0.03	0.03	0.03	0.03
K	Shipping height	5.97	5.97	6.17	6.17	6.57	6.66	6.96	6.96
L	Shipping length (includes burner)	8.56	8.56	9.97	10.86	10.83	11.78	12.70	13.58

CONNECTIONS		10	15	20	25	30	40	50	60
Smoke Stack Diameter	in	6	8	8	9	9	10	10	10
Main steam outlet diameter	in	3/4	3/4	1	1	1	1 1/4	1 1/4	1 1/2
Boiler feedwater diameter	in	1	1	1	1 1/4	1 1/4	1 1/4	1 1/4	1 1/4
Water Softener feedwater diameter	in	3/4	3/4	3/4	3/4	3/4	3/4	3/4	3/4
Bottom blowdown diameter	in	1	1	1	1	1	1	1 1/4	1 1/4
Level Control blowdown diameter	in	1	1	1	1	1	1	1	1
Surface blowdown diameter	in	1	1	1	1	1	1	1	1

FOUNDATION BASES		10	15	20	25	30	40	50	60
M	Total width of base	4.40	4.40	4.59	4.59	5.12	5.12	5.41	5.41
N	Distance between bases	2.43	2.43	2.62	2.62	3.15	3.15	3.44	3.44
O	Width of each bases	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
P	Length of bases	5.54	5.54	5.94	5.94	6.17	7.41	8.07	8.83
Q	Height of bases	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66

* The actual firing rate depends on fuel quality, burner selection and adjustment, combustion controls, operating pressure, etc. For an estimated calculation of a specific configuration contact your Powermaster salesman.

** Width for freight clearance

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Creator: SZ

Revision: LN

Powermaster Boilers reserves the right to make modifications to this sheet without notice. All dimensions are approximate and indicative only.

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