

Powermaster Series WB-A2-3P

Three Pass Wet Back A2 Boilers

Maximum allowable working pressure 300 psig



Boiler Data Sheet

MODEL BHP

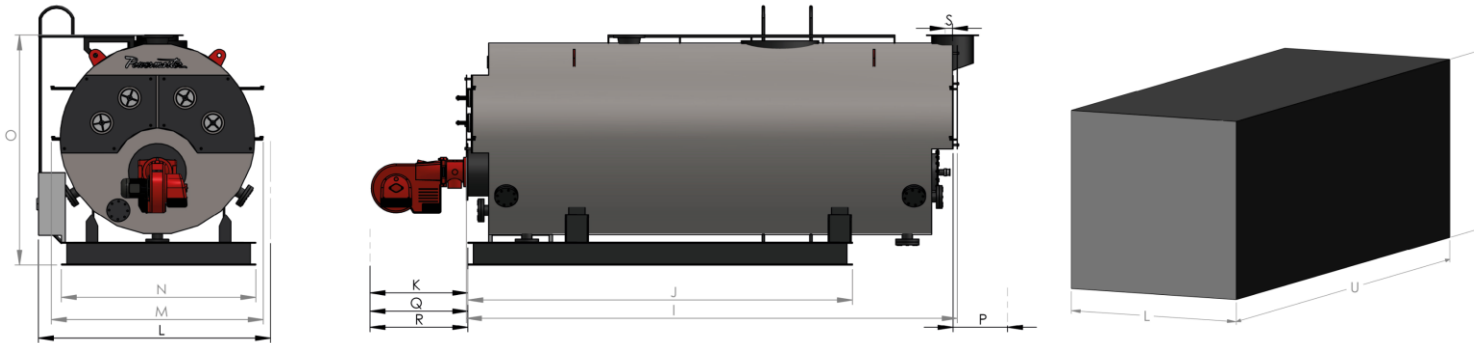
NOMINAL CAPACITIES		300	350	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500
Steam generation from and at 212 °F & 1 atm.	lb/hr	10,350	12,075	13,800	17,250	20,700	24,150	27,600	31,050	34,500	37,950	41,400	44,850	48,300	51,750
Heating Surface	SQFT	1,500	1,750	2,000	2,500	3,000	3,500	3,792	4,032	4,160	4,477	4,800	5,122	5,474	5,895
Boiler Output	MBH	10,043	11,717	13,391	16,738	20,086	23,434	26,781	30,129	33,477	36,824	40,172	43,520	46,867	50,215

FIRING RATE FOR BURNER SELECTION*

No. 2 Oil - Diesel (140,000 BTU/gal)	gal/hr	89.7	104.6	119.6	149.4	179.3	209.2	239.1	269.0	298.9	328.8	358.7	388.6	418.5	448.3
Natural Gas (1,000 BTU/ft ³)	ft ³ /hr	12,554	14,646	16,738	20,923	25,107	29,292	33,476	37,661	41,845	46,030	50,214	54,399	58,583	62,768
LP Gas (91,500 BTU/gal)	gal/hr	137.2	160.1	182.9	228.7	274.4	320.1	365.9	411.6	457.3	503.1	548.8	594.5	640.3	686.0
Heavy Oil (150,000 BTU/gal)	gal/hr	83.7	97.6	111.6	139.5	167.4	195.3	223.2	251.1	279.0	306.9	334.8	362.7	390.6	418.5

WEIGHTS

Empty Boiler	lb	41,729	46,910	53,270	60,894	75,458	90,751	97,696	104,958	108,564	112,760	117,068	121,541	125,383	130,408
Flooded Boiler	lb	64,935	74,137	83,683	95,782	118,106	137,403	151,927	161,171	165,560	171,242	182,362	190,920	197,205	204,884



DIMENSIONS		300	350	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500
I	Boiler Length	ft	17.75	20.34	20.93	22.44	23.85	26.05	26.12	26.12	26.21	26.21	26.38	26.54	27.26
J	Base Length	ft	14.14	18.11	18.60	20.05	21.52	23.56	23.56	23.72	23.72	23.72	23.79	23.88	24.51
K	Burner Length (estimated) **	ft	3.64	5.41	5.25	5.38	5.38	5.09	5.31	5.31	6.92	6.92	6.86	6.76	6.69
L	Total Width	ft	9.25	9.25	9.65	9.97	10.50	10.79	11.32	11.52	11.58	11.71	12.07	12.34	12.50
M	Limit Width***	ft	8.07	8.07	8.46	8.79	9.32	9.61	10.14	10.33	10.40	10.53	10.89	11.15	11.32
N	Base Width	ft	7.41	7.41	7.81	8.14	8.66	8.96	9.48	9.68	9.74	9.88	10.24	10.50	10.66
O	Total Height (to steam outlet)	ft	8.92	8.92	9.51	9.88	10.37	10.66	11.22	11.38	11.75	11.88	12.27	12.57	12.73
P	Back access clearance for maintenance	ft	3.71	3.71	3.90	4.07	4.33	4.48	4.74	4.84	4.87	4.94	5.12	5.25	5.33
Q	Front access clearance for maintenance	ft	3.71	3.71	3.90	4.07	4.33	4.48	4.74	4.84	4.87	4.94	5.12	5.25	5.33
R	Front flux tubes exchange clearance	ft	14.93	17.52	17.68	19.13	20.54	22.28	22.28	22.28	22.28	22.28	22.21	22.11	22.57
S	Smoke stack center to back of boiler	ft	0.23	0.16	0.16	0.16	0.10	0.10	0.10	0.00	-0.10	-0.10	-0.13	-0.13	-0.10
T	Shipping height	ft	9.45	9.45	10.01	10.37	10.86	11.15	11.68	11.84	12.17	12.34	12.70	12.93	13.09
U	Estimated shipping length (includes burner)	ft	22.18	26.61	27.10	28.81	30.38	32.38	32.78	32.94	33.10	34.88	34.97	35.14	35.24

CONNECTIONS

Smoke Stack Diameter	in	20	20	22	24	26	28	30	32	34	36	37	39	40	41
Main steam outlet diameter	in	4	4	6	6	6	6	6	8	8	8	10	10	10	10
Boiler feedwater diameter	in	2	2	2	2	2	2	2.5 *****	2.5 *****	3	3	3	3	3	3
Bottom blowdown diameter	in	1	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	1 1/4	1 1/4
Level Control blowdown diameter	in	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Surface blowdown diameter	in	1	1	1	1	1	1	1	1	1	1	1	1	1	1

FOUNDATION BASES

Total width of base	ft	8.14	8.14	8.53	8.86	9.38	9.68	10.20	10.40	10.47	10.60	10.96	11.22	11.38	11.48
Distance between bases	ft	6.17	6.17	6.56	6.89	7.41	7.71	8.23	8.43	7.71	7.84	8.20	8.46	8.63	8.73
Width of each bases	ft	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	1.38	1.38	1.38	1.38	1.38	1.38
Length of bases	ft	14.80	18.77	19.26	20.70	22.18	24.21	24.21	24.21	24.38	24.38	24.38	24.44	24.54	25.16
Height of bases	ft	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66

Termodinámica Enica S.A. de C.V. TEN-840430-465
 Av. Dr. Jiménez Cantú Lote 2.5 s/n, Plaza Antigua Edif 3 Ofna. 3-16
 Atizapán de Zaragoza, Edo. de México, CP. 52937
 T. +52(55) 5393 5711 ~ F. +52(55) 5393 9607

* 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.

** Dimensions varies based on burner selection

*** Width for freight clearance

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