

# Powermaster Series WB-A2-3P-HW

## Three Pass Wet Back A2 Hot Water Boilers

Maximum allowable working pressure 100 psig



### Boiler Data Sheet

#### MODEL BHP

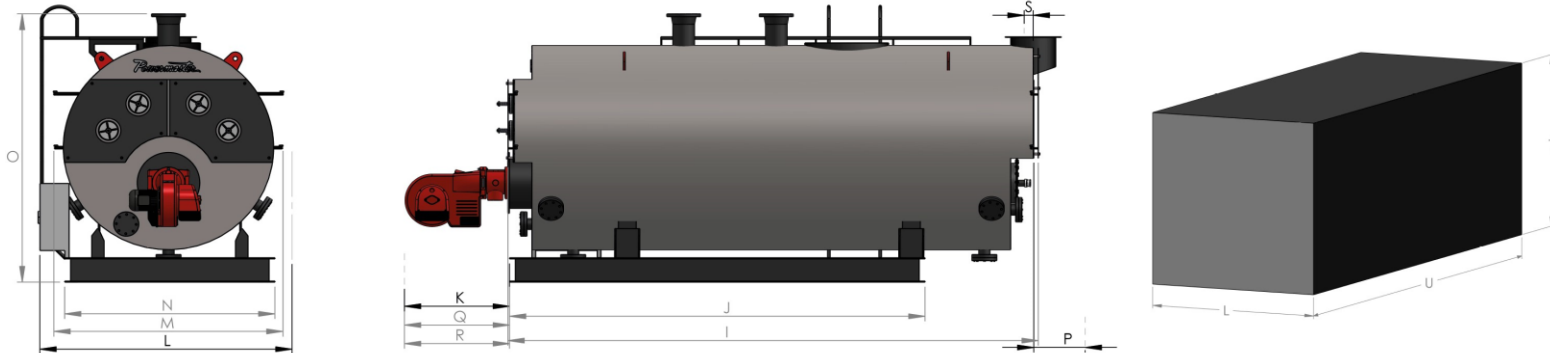
NOMINAL CAPACITIES		80	100	125	150	200	250	300	350	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500
Heating Output	MBH	2,678	3,348	4,185	5,022	6,696	8,370	10,044	11,718	13,392	16,740	20,087	23,435	26,783	30,131	33,479	36,827	40,175	43,523	46,871	50,219
Heating Output	KW	785	981	1,226	1,471	1,962	2,452	2,943	3,433	3,924	4,905	5,885	6,866	7,847	8,828	9,809	10,790	11,771	12,752	13,733	14,714
Heating Output	Mcal/hr	675	844	1,055	1,265	1,687	2,109	2,531	2,953	3,374	4,218	5,062	5,905	6,749	7,592	8,436	9,280	10,123	10,967	11,810	12,654

#### FIRING RATE FOR BURNER SELECTION\*

No. 2 Oil - Diesel ( 140,000 BTU/gal )	gal/hr	23.9	29.9	37.4	44.8	59.8	74.7	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/ft3 )	ft3/hr	3,348	4,185	5,231	6,277	8,369	10,461	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	36.6	45.7	57.2	68.6	91.5	114.3	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	22.3	27.9	34.9	41.8	55.8	69.7	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	12,445	13,759	16,667	18,193	24,114	28,177	31,731	35,635	39,509	45,486	53,466	61,328	65,980	68,383	71,441	79,047	82,616	86,593	90,052	94,190
Flooded Boiler	lb	20,906	22,873	28,005	30,591	40,450	48,916	55,314	63,290	70,513	81,044	97,025	109,435	121,790	126,195	130,051	139,175	149,526	157,595	163,497	170,329



DIMENSIONS		80	100	125	150	200	250	300	350	400	500	600	700	800	900	1000	1100	1200	1300	1400	1500
I Boiler Length	ft	12.50	13.42	14.37	14.53	16.54	17.36	17.78	20.34	20.93	22.44	23.88	26.05	26.12	26.12	26.12	26.21	26.21	26.38	26.54	27.26
J Base Length	ft	9.84	10.73	11.38	11.61	13.12	13.88	14.21	18.18	18.67	20.08	21.52	23.59	23.59	23.59	23.75	23.75	23.75	23.85	23.92	24.54
K Burner Length (estimated) **	ft	2.40	2.40	2.85	2.85	3.64	3.64	3.64	5.41	5.25	5.38	5.38	5.09	5.31	5.31	5.31	6.92	6.92	6.86	6.76	6.69
L Total Width	ft	7.15	7.22	7.58	7.81	8.30	8.83	9.25	9.68	10.01	10.50	10.79	11.35	11.35	11.52	11.58	11.71	12.07	12.34	12.50	12.60
M Limit Width***	ft	5.97	6.04	6.40	6.63	7.12	7.64	8.07	8.07	8.50	8.83	9.32	9.61	10.17	10.33	10.40	10.53	10.89	11.15	11.32	11.42
N Base Width	ft	5.31	5.38	5.74	5.97	6.46	6.99	7.41	7.41	7.84	8.17	8.66	8.96	9.51	9.68	9.74	9.88	10.24	10.50	10.66	10.76
O Total Height (to HW outlet flanges)	ft	7.35	7.45	7.97	8.27	8.76	9.32	9.74	10.33	10.66	11.15	11.52	12.04	12.20	12.53	12.73	13.09	13.32	13.48	13.58	
P Back access clearance for maintenance	ft	2.66	2.69	2.87	2.99	3.23	3.49	3.71	3.71	3.92	4.08	4.33	4.48	4.76	4.84	4.87	4.94	5.12	5.25	5.33	5.38
Q Front access clearance for maintenance	ft	2.66	2.69	2.87	2.99	3.23	3.49	3.71	3.71	3.92	4.08	4.33	4.48	4.76	4.84	4.87	4.94	5.12	5.25	5.33	5.38
R Front flux tubes exchange clearance	ft	10.27	11.18	11.94	12.10	14.01	14.60	14.93	17.52	17.68	19.13	20.54	22.28	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	0.30	0.16	0.16	0.16	0.16	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	-0.03
T Shipping height	ft	7.35	7.45	7.97	8.27	8.76	9.32	9.74	10.33	10.66	11.15	11.52	12.04	12.20	12.53	12.73	13.09	13.32	13.48	13.58	
U Estimated shipping length (includes burner)	ft	15.29	16.14	17.75	17.91	20.83	21.75	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	35.86

#### CONNECTIONS

Smoke Stack Diameter	in	12	12	14	14	16	18	20	20	22	24	26	28	30	32	34	36	37	39	40	41
Hot Water Outlet to Circuit Diameter	in	3	4	4	6	6	8	8	8	8	10	10	12	12	12	12 ****	14 ****	14 ****	14 ****	14 ****	14 ****
Hot Water Inlet from Circuit Diameter	in	3	4	4	6	6	8	8	8	10	10	12	12	12	12	12 ****	14 ****	14 ****	14 ****	14 ****	14 ****
Air Purge Diameter	in	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
Bottom Drain Diameter	in	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	2	2	2	2	2	2	2	2	2	2
Maximum Safety Valves Output Diameter	in	1	1	1 1/4	1 1/4	1 1/2	1 1/4	1 1/2	1 1/2	2	2	2	2	2	2	2	2	2	2	2	2

#### FOUNDATION BASES

Total width of base	ft	6.04	6.10	6.46	6.69	7.19	7.71	8.14	8.14	8.56	8.89	9.38	9.68	10.24	10.40	10.47	10.60	10.96	11.22	11.38	11.48
Distance between bases	ft	4.07	4.13	4.49	4.72	5.22	5.74	6.17	6.17	6.59	6.92	7.41	7.71	8.27	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	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	10.50	11.38	12.04	12.27	13.78	14.53	14.86	18.83	19.32	20.73	22.18	24.25	24.25	24.25	24.41	24.41	24.41	24.51	24.57	25.20
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	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 Ofno. 3-16  
 Atlixpán 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  
 \*\*\*\* Adaptable to hydraulic project

Date: DEC 02, 22  
 Creator: SZ  
 Revision: LN