



High Efficiency Boilers



VW

Hydronic Boiler



VW Hydronic Boiler

30 to 100 psi
165 to 2,750 MBH Packaged Boilers,
Natural or Propane Gas, #2 Oil, Combination

High Efficiency

Series VW boilers are positive pressure non-condensing appliances. They are equipped with forced-draft burners for reliable 83% efficiency. High-temperature fiberglass rope is used to gasket burner flanges to burner ports and steel lids to flue-gathering chambers. Custom-fabricated bent steel turbulators installed in fire-tubes limit flue gas velocity, insuring maximum heat transfer. Heat losses associated with draft hoods and barometric dampers are eliminated and breeching/stack sizes can be reduced.

Low Stress Design

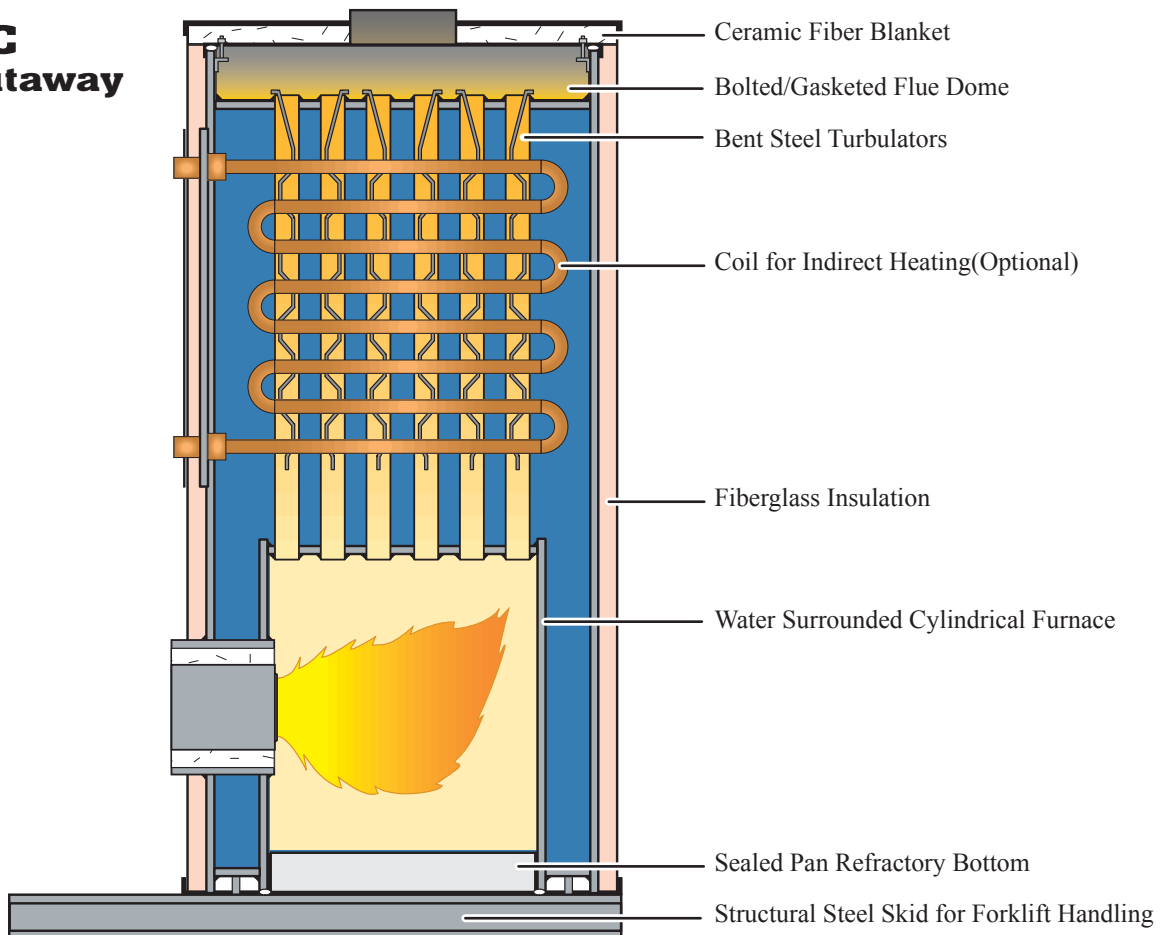
Single pass construction eliminates differential expansion forces across heads, permitting very low return temperatures and immediate "cold starting" response to all calls for heat*.

Modular Heating Plants

Multiple VW Boilers can be arranged in a modular configuration to achieve higher capacities and maximum turndown. Compact size individual boilers fit through existing doorways, hallways, elevators, etc. Relatively light weights simplify location of heating plants anywhere within the building.

*Consult factory for boiler configuration/control options required for direct very low temperature operation.

VW/VWC Boiler Cutaway



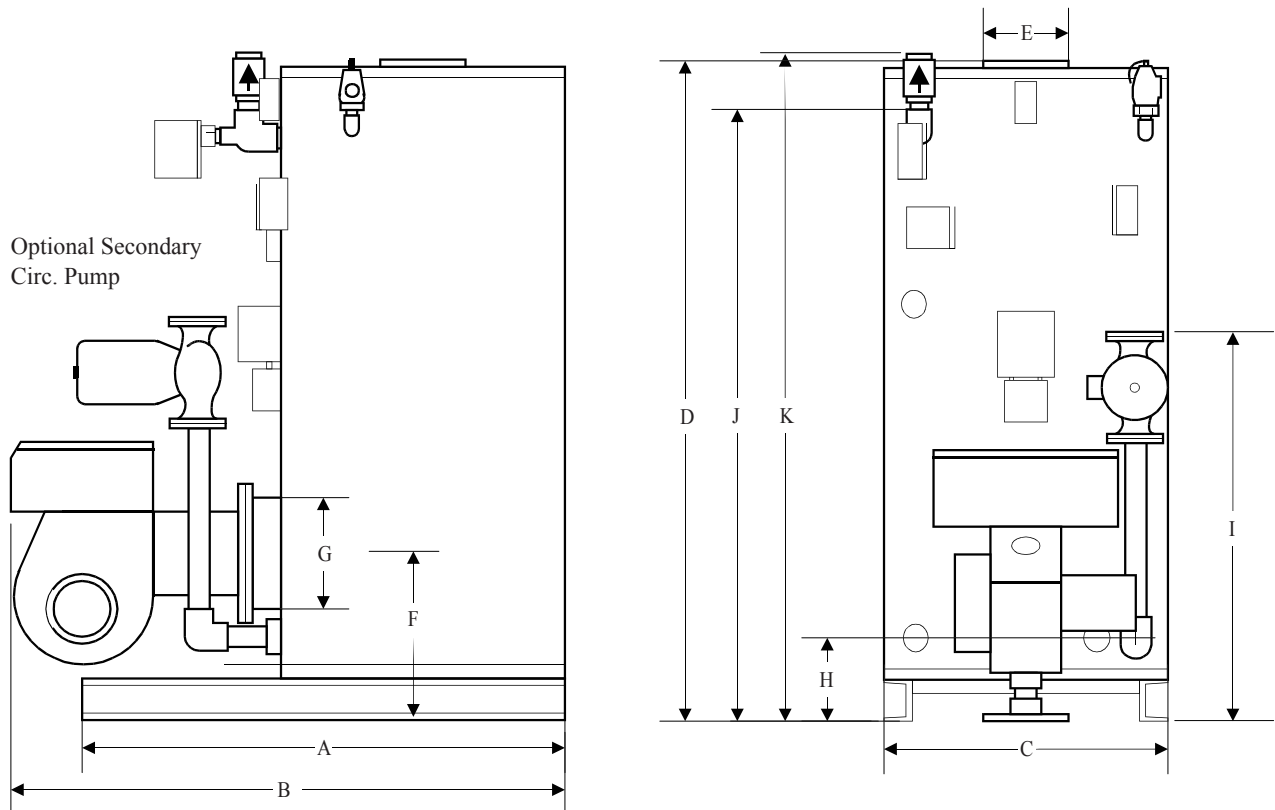
L.E.S. Series VW Packaged Boilers

30 to 100 psi Water • Shock-Proof Vertical Design • Unrestricted HWR/HWS Differential • 83% Efficiency • Structural Steel Skids

Ratings / Data / Dimensions

Model: VW	25	37	50	60	70	78	100	110	135	150	180	200	220	245	270	315	340	375
Input																		
Gas (MB/CF) CFH	200	305	399	505	600	700	900	1000	1200	1350	1635	1800	2000	2200	2420	2825	3020	3300
Oil (140MB/Gal) GPH	1.4	2.2	2.9	3.6	4.3	5.0	6.4	7.1	8.6	9.6	11.7	12.9	14.3	15.7	17.3	20.2	21.6	23.6
Output																		
MBH	165	250	330	420	500	575	750	835	1000	1125	1360	1500	1675	1840	2010	2345	2510	2750
Boiler Horsepower	5.0	7.5	10.0	12.5	15.0	17.5	22.5	25.0	30.0	33.5	40.7	44.8	50.0	55.0	60.0	70.0	75.0	82.5
Gas Burner Motor HP	.25	.25	.25	.25	.25	.25	.33	.33	.33	.33	.33	.33	.5	.5	1.0	1.0	1.0	2.0
Oil Burner Motor HP	.25	.25	.25	.33	.33	.33	.33	.33	.5	.5	.75	.75	.75	.75	1.5	1.5	1.5	2.0
SQ. FT. Heating Surface																		
Primary	7.9	7.8	11.1	10.9	12.9	12.8	15.2	16.0	18.1	19.1	19.9	22.1	23.2	25.6	26.5	29.1	29.4	32.3
Total Fireside	24	33	45	53	61	70	90	98	122	136	162	180	199	222	244	282	307	338
Total Waterside	26	36	50	58	66	77	99	108	134	151	179	200	220	246	271	313	340	375
Boiler Data																		
Furnace Vol. (CU. FT.)	1.9	1.9	3.3	3.3	4.3	4.3	5.6	6.1	7.7	8.4	9.1	10.7	11.7	13.8	14.7	17.3	17.6	20.6
Water Cap. (Gal; Full)	41	38	59	57	78	75	98	92	124	115	153	136	190	169	240	209	272	240
Dry Weight (LBS)	500	550	774	825	975	1025	1225	1275	1500	1575	1825	1925	2150	2275	2550	2775	3150	3350
Dimensions in Inches																		
A. Skid Length	30	30	36	36	36	36	39	39	43	43	45	45	50	50	54	54	57	57
B. Overall Length	48	48	51	51	54	54	56	56	62	62	64	64	72	72	78	78	88	88
C. Width	22	22	25	25	28	28	30 1/4	30 1/4	34 1/4	34 1/4	36 1/2	36 1/2	41	41	45	45	49	49
D. Height	53	53	64	64	66	66	71	71	71	71	77	77	78	78	78	78	78	78
E. Flue Conn. Size	5	5	6	6	6	6	8	8	8	8	10	10	10	10	12	12	12	12
Gas Conn. Size*	3/4	3/4	3/4	1	1	1	1 1/4	1 1/4	1 1/4	1 1/4	1 1/2	1 1/2	2	2	2	2	2	2
F. Burner Port Height	12	12	13	13	14	14	16	16	16	16	16	16	16	16	16	16	16	16
G. Burner Port ID	5	5	5	6 1/2	9 1/4	9 1/4	9 1/4	9 1/4	9 1/4	9 1/4	9 1/4	9 1/4	9 1/4	9 1/4	9 1/4	9 1/4	16	16
Return Size**	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	2	2	2 1/2	2 1/2	3	3	3	3	3	3
H. Return Height	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
I. Height with Pump	26	26	26	26	28	28	28	28	30	30	30	30	32	32	38	38	38	38
Supply Size	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	1 1/2	2	2	2 1/2	2 1/2	3	3	3	3	3	3
J. Supply Height	48	48	59	59	60	60	66	66	65	65	72	72	73	73	73	73	73	73
K. Height with C.V.	54	54	65	65	66	66	72	72	72	72	78	78	82	82	82	82	82	82

* 7-14" W.C. available. ** Standard openings, secondary pumps, check valves. Consult factory for high flow &/or low delta applications.





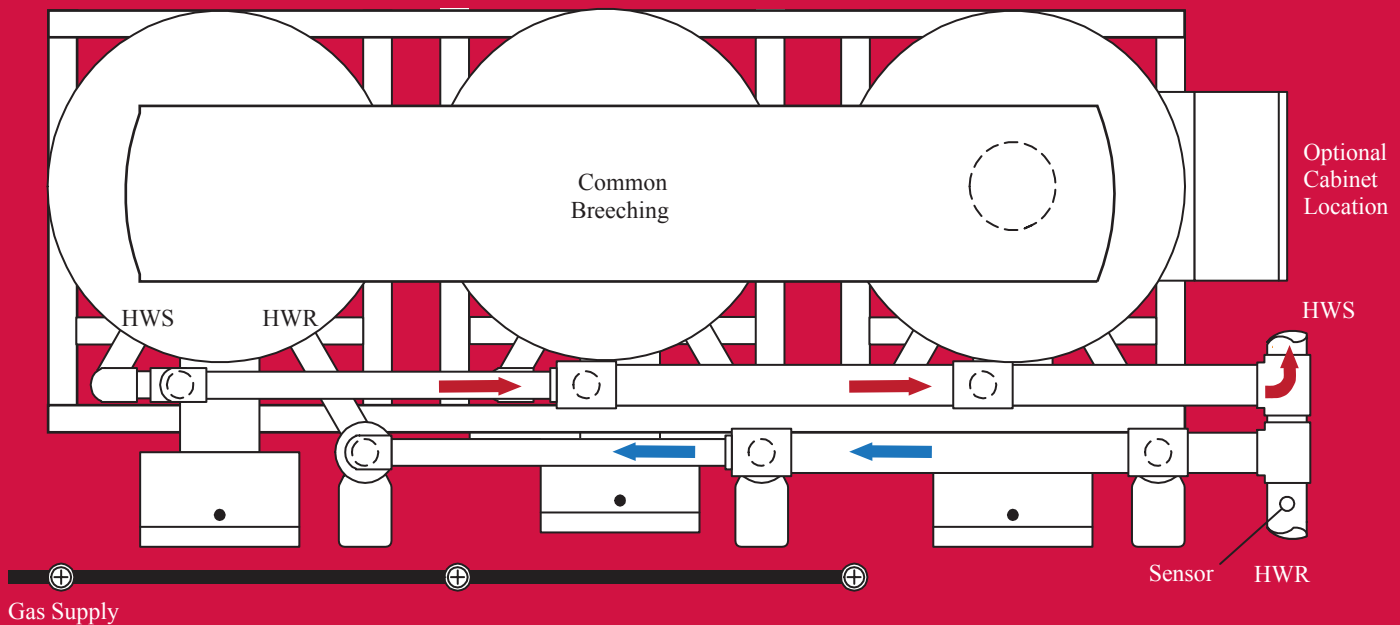
VW/VWC

Modular Heating Plants

Partial Load Efficiency

Modular heating plants achieve high partial load efficiencies by matching individual modules to light loads. With true parallel primary/secondary piping and correct control including warm weather and night/weekend shutdown, light load equipment cycling is minimized while both unnecessary heating plant operation and excess capacity heat loss paths are completely eliminated. Automatic sequencing and PLC based controls are available upon request.

Modular Heating Plant Layout Schematic



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