

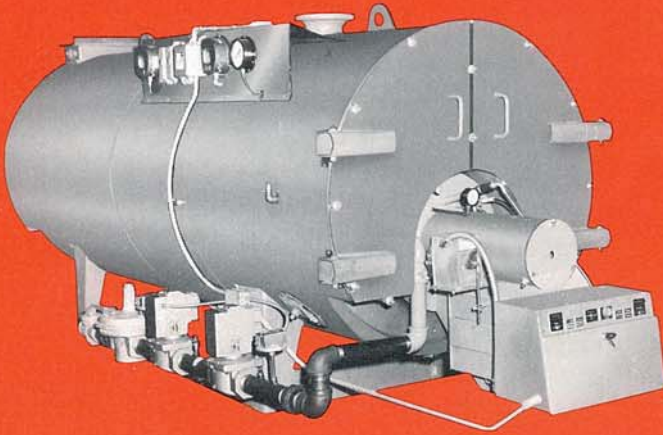


# KEWANEE®

## Classic III

100 PSI WATER

**NEED PARTS?**  
**OEM Boiler Parts**  
**Phone: (717) 367-9900**  
**sales@oemboilerparts.com**



U/L  
Listed

- ASME Code Constructed Boiler for 100 PSI Water Working Pressure, (250° F. Max.)
- Three Pass Design features a rear combustion chamber that's totally submerged within the boiler water. This eliminates the need for refractory baffles, reduces costly maintenance, eliminating refractory replacement. Heat loss is minimized and overheating of the rear tube sheet is prevented. The wetback surface becomes additional primary heating surface, improving boiler performance.
- All Heating surfaces are accessible without disturbing burner equipment, reducing inspection and maintenance costs. Separate rear tube sheets eliminate warpage that would result from heat differentials between passes. All tubes are roller expanded. 2" Boiler tubes are used on 80-250 hp and 2½" tubes 300-750 hp.
- Factory installed 22 gauge enameled steel jacket with mineral fiber insulation. Extra density insulation is used at selected locations for additional protection at potential pressure points.
- Hinged steel front flue doors lined with refractory insulation, knife edge sealed to square asbestos gasket gives gas tight construction for pressurized firing.
- The CLASSIC III units are offered in a full range of sizes from 60 to 750 hp, fired by a KEWANEE gas, oil or combination gas-oil burner.
- The CLASSIC III Water Boiler features both top supply and return connections to insure proper internal circulation by use of an internal diffuser.
- Units furnished with water trimming, consisting of Low Water Cut-off, ASME Code Relief Valve(s), Pressure Gauge and Thermometer.
- All CLASSIC III Units are Factory Firetested, firing the unit with the specified fuel and simulating field conditions, adjusting fuel & air ratios plus checking all controls and operating sequence. A detailed report of this test is delivered to the purchaser with each unit. In addition KEWANEE provides Start-Up and 90 days free service by Factory Qualified Organizations. This service includes instruction to the Boiler Operator to obtain trouble free operation.

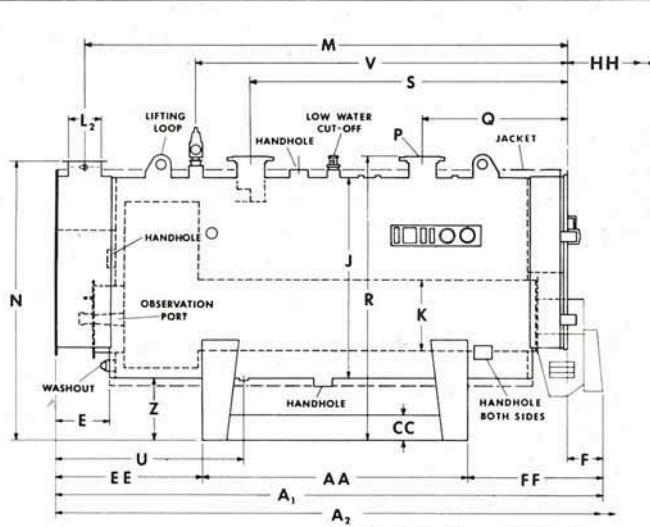
480 alternate configurations of the basic 3-pass design were Computer evaluated to select optimum arrangements found in the CLASSIC III. With maximum efficiency and minimum pressure drops, this design maintains safe stress levels in critical zones. These Computer results have been completely Laboratory strain gauge tested in Kewanee, and fully performance tested in the field.

RATINGS															
Unit Number		60	70	80	100	125	150	200	250	300	350	400	500	600	750
Rating - Horsepower		60	70	80	100	125	150	200	250	300	350	400	500	600	750
MBh		2009	2343	2678	3348	4184	5021	6695	8369	10043	11716	13390	16738	20085	25106
Water Net (MCA)	MBh	1747	2037	2329	2911	3638	4366	5822	7277	8735	10190	11645	14555	17465	21840
Firing Rate - Gas (1000 BTU/cu. ft.)	MBh	2511	2929	3348	4185	5231	6278	8370	10463	12554	14646	16740	20925	25110	31383
Oil (140,000 BTU)	gph.	17.9	20.9	23.9	29.9	37.4	44.8	59.8	74.7	89.7	104.6	119.6	149.5	179.5	224.2
Oil (150,000 BTU)	gph.	—	—	—	27.9	34.9	41.9	55.8	69.8	83.7	97.6	111.6	139.5	167.5	209.2
Heating Surface - ASME	sq. ft.	300	350	400	500	625	750	1000	1250	1500	1750	2000	2500	3000	3750
Relief Valve Capacity	lbs.	2400	2800	3200	4000	5000	6000	8000	10000	12000	14000	16000	20000	24000	30000
DATA															
Unit Number		60	70	80	100	125	150	200	250	300	350	400	500	600	750
Insulation Thickness	in.	1½	1½	1½	1½	1½	1½	1½	2	2	2	2	2	2	2
Minimum Stack Diameter	in.	12	12	12	12	14	14	16	20	20	20	24	24	27	30
Water Content (full)	gals.	306	360	402	505	581	701	901	1125	1547	1807	2055	2307	2653	3274
Approx. weight filled	lbs.	7155	8403	9651	10874	13144	15945	18913	24481	31801	36071	40941	47644	55429	69609
Approx. Dry weight	lbs.	4600	5400	6300	7100	8300	10100	11400	15100	18900	21000	23800	28400	33300	42300

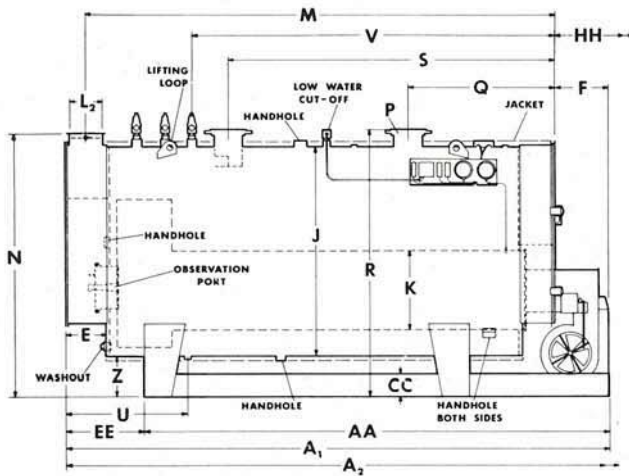
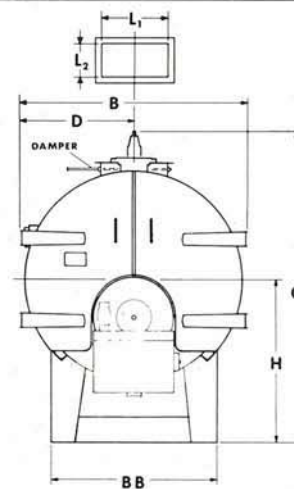
**NEED PARTS?**  
**OEM Boiler Parts**  
**Phone: (717) 367-9900**  
**sales@oemboilerparts.com**

# DIMENSIONS

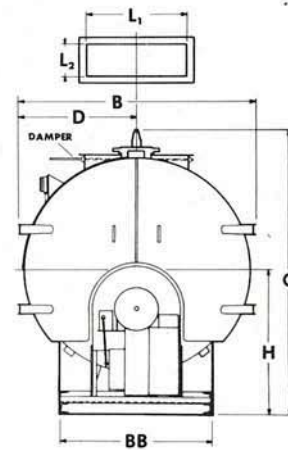
**KEWANEE *Classic III***  
**100 PSI WATER**  
**SCOTCH PACKAGE UNITS 60-750**



60 H.P. thru 250 H.P.



300 H.P. thru 750 H.P.



**DIMENSIONS (inches)**

Unit Number	60	70	80	100	125	150	200	250	300	350	400	500	600	750
A <sub>1</sub> - Overall length	136	150	138	164½	159½	179	185½	216	200	224	222½	229½	235½	276
A <sub>2</sub> - Overall length including Tube Removal	195½	223½	199½	241½	231	271	281	344	323	371	368	354	367	449
B - Overall width	50	50	56	56	62	62	68	68	80	80	86	93	99	99
C - Overall height	65½	68	74½	74½	87	87	93	93	105	105	111	117½	128	128
D - Boiler centerline to greatest width	25	25	28	28	31	31	34	34	40	40	43	46½	49½	49½
E - Rear smokebox to shell	12	12	12	12	12	12	14	14	14	14	14	16	16	16
F - Burner to front of boiler	23½	23½	23½	29	29	29	29	29	21½	21½	21½	31½	28	28
H - Boiler centerline height	33½	33½	36½	36½	42½	42½	45½	45½	51½	51½	54½	57½	65½	65½
J - Shell diameter	42	42	48	48	54	54	60	60	72	72	78	84	90	90
K - Furnace diameter	17	17	20	20	23	23	25	25	30	30	34	34	37	37
L <sub>1</sub> - Smoke outlet length	16	16	19	19	24	24	30	30	38	38	38	38	48	60
L <sub>2</sub> - Smoke outlet width	8	8	9	9	10	10	12	12	12	12	12	14	14	14
M - Smoke outlet centerline	107	121	108	129½	124	143½	149	180	173½	197½	196	190	199	239½
N - Smoke outlet height	59	59	65	65	74	74	80	80	92	92	98	104	115	115
P - Supply Size - 150 lb. ANSI flange	4*	4*	6	6	6	6	6	6	8	8	8	8	8	10
Q - Supply centerline	28½	28½	38½	38½	38½	38½	38½	38	42	42	42	42½	45½	45½
R - Supply height	57	57	66	66	75	75	81	81	93	93	99	105½	116½	117
S - Return centerline	70½	84	68	85½	78½	98	92½	123	121½	133½	132	113½	117½	159
Return size - 150 lb. ANSI flange	4*	4*	6	6	6	6	6	6	8	8	8	8	8	10
U - Drain centerline	42	42	42	42	42	42	44	44	44	49	49	56	56	56
Drain size*	1¼	1½	1½	1½	1½	1½	2	2	2	2	2	2	2	2
V - Relief valve centerline	79½	93	78	99	94½	114	106½	137	136½	148½	147	128½	136½	178
Z - Base height - floor to boiler	12	12	12	12	15	15	15	15	15	15	15	15	20	20
AA - Base length	60	70	60	80	80	96	96	130	172	192	192	194	204	244
BB - Base width	31½	31½	40	40	42	42	46	46	58	58	64	58	64	64
CC - Base height	6	6	6	6	6	6	8	8	8	8	8	10	10	10
EE - Base to rear of boiler	23½	27½	25½	26½	21½	25	31½	28	28	32	30½	35½	31½	32
FF - Base to front of burner	52½	52½	52½	58	58	58	58	58	33½	33½	33½	33½	39½	39½
HH - Tube removal space	84	97	85	106	100½	121	125	157	142½	166	167	157	160	200

\* Threaded opening.

**NEED PARTS?**  
**OEM Boiler Parts**  
**Phone: (717) 367-9900**  
**sales@oemboilerparts.com**