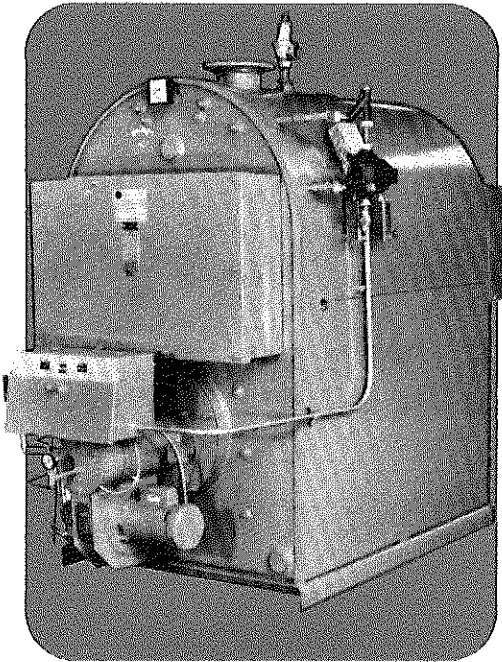


KEWANEE® TYPE "K-5"

Packaged Firebox Boiler Oil, Gas, Combination Oil/Gas Fired

- These units, rated at 5.0 square feet of surface per boiler horsepower, maximize efficiency and surface life.
- Type "K" Packages are offered in 15 sizes ranging from 422,000 to 4,519,000 Btu/Hr (12.6 to 135.0 Bhp) fired by a Kewanee gas, oil, or combination gas-oil burner.
- Meets requirements of the ASME Code for 15 psi steam or 30 psi water pressure. ASME Code 60 psi water pressure also available.
- Forced draft operation eliminates the need for tall, costly stacks or induced draft fans.
- Three Pass Wetback Design provides maximum heat transfer with low stack temperature. The large firebox with arched upright crown sheet provides an exceptionally high proportion of the primary (radiant) heating surface which is many times more efficient than secondary (indirect) heating surface. Its extra large furnace volume assures complete combustion, clean firing, unrestricted gas flow, low heat release, smooth starts, and quiet operation.
- Wetback Design has a rear water wall which becomes the most effective heating surface of the boiler.

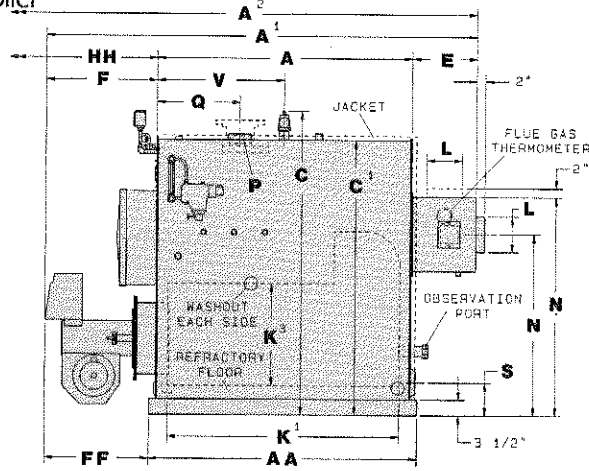
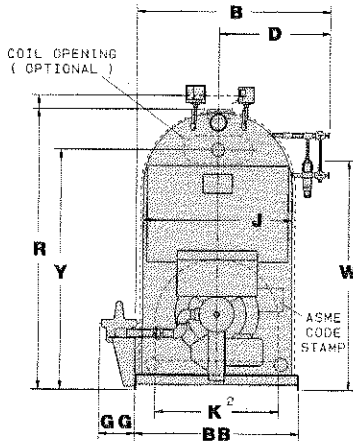


- Water units are furnished with burner controls, low water cut-off, relief valve(s), combination altitude gauge and thermometer, 3" flue gas thermometer. Low fire hold aquastat is added on K-5.0-253 thru K-5.0-619.
- Front fluebox cover with lightweight blanket insulation securely keyed in place. All firetubes are 2" and are roller expanded.
- Rear fluebox available with top or rear outlet. 3" cast refractory floor retains smooth reflecting and insulating qualities in transit and operation.
- 22 gauge factory installed steel jacket with attractive smooth enamel finish.
- Like most firetube boilers, it is easy to clean and maintain. Firetubes can be cleaned with flue scrapers. Waterside can easily be flushed and inspected through generous washouts. This is in marked contrast to other types of boilers.
- Generous water content, large disengaging area, and steam space offer instant reserve capacity and high quality steam.
- Guaranteed fuel to steam or fuel to water efficiencies at 50-75 and 100% firing rates.
- Units are insulated, completely assembled with burner, accessories and skid type base. Units can be installed by fork truck, hoist or rollers. Only service connections are needed to place units in operation.
- Steam units are furnished with burner controls, combination water column, low water cut-off, pump control, safety valve(s), compound steam, vacuum gauge, water gauge, and 3" flue gas thermometer. Units K-5.0-59 thru K-5.0-315 are furnished with a low water cut-off.

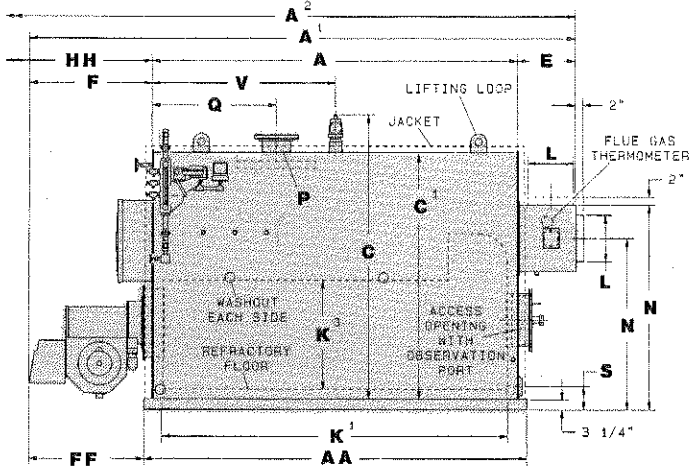
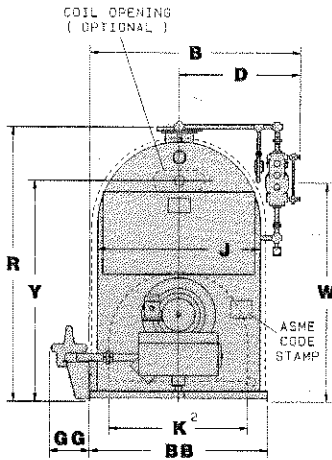
RATINGS & DATA

UNIT NUMBER	K-5.0-	59	72	85	98	118	142	166	192	226	253	284	315	418	521	619
Rating —																
MBh	422	522	616	716	850	1,031	1,205	1,399	1,600	1,841	2,069	2,296	3,013	3,763	4,519	
Horsepower	12.6	15.6	18.4	21.4	25.4	30.8	36.0	41.8	47.8	55.0	61.8	68.6	90.0	112.4	135.0	
Steam — 212°F	435	538	635	738	876	1,062	1,242	1,442	1,649	1,897	2,132	2,366	3,105	3,878	4,657	
Steam (gross output)	1,758	2,175	2,567	2,983	3,542	4,296	5,021	5,829	6,667	7,671	8,621	9,567	12,554	15,679	18,629	
Steam (net output)	1,322	1,635	1,930	2,243	2,663	3,230	3,775	4,383	5,013	5,768	6,482	7,193	9,439	11,789	14,157	
Firing rate —																
Gas (1,000 Btu/cu. ft.)	527	653	770	895	1,063	1,289	1,506	1,749	2,000	2,301	2,586	2,870	3,766	4,704	5,649	
Oil (140,000 Btu/gal.)	3.8	4.7	5.5	6.4	7.6	9.2	10.8	12.5	14.3	16.4	18.5	20.5	26.9	33.6	40.4	
Oil (150,000 Btu/gal.)	—	—	—	—	—	—	—	—	—	15.3	17.2	19.1	25.1	31.4	37.7	
Waterside Heating Surface —																
Primary	19.0	21.1	23.2	25.4	30.8	34.2	37.6	41.4	47.6	51.9	55.9	59.9	86.3	100.2	112.9	
Total	63	76	92	107	127	154	180	209	239	275	309	343	450	562	675	
Fireside Heating Surface —																
Primary	18.4	20.5	22.6	24.7	30.0	33.3	36.7	40.5	46.5	50.8	54.7	57.7	82.6	95.8	108.4	
Total	59	72	85	98	118	142	166	192	220	253	284	315	418	521	619	
Furnace volume	7.6	9.1	10.5	11.7	15.4	17.9	20.4	23.3	29.5	33.4	37.1	40.8	66.0	80.4	94.3	
Required Safety Valve Capacity																
Steam per hr	472	576	680	784	944	1,136	1,328	1,536	1,760	2,024	2,272	2,520	3,344	4,168	4,952	
Insulation Thickness	1"	1"	1"	1"	1"	1"	1"	1"	1"	1"	1"	2"	2"	2"	2"	
Approx. dry weight	1,900	2,050	2,200	2,350	2,600	2,950	3,300	3,650	4,000	4,450	4,900	5,300	8,200	9,300	10,800	

KEWANEE Type "K-5" Packaged Firebox Boiler



K-5.0-59 thru K-5.0-315



K-5.0-418 thru K-5.0-619

DIMENSIONS (feet-inches)

UNIT NUMBER	K-5.0-59	72	85	98	118	142	166	192	220	253	284	315	418	521	619
A — Boiler length	2'6 1/2"	3'0 1/2"	3'6 1/2"	4'0 1/2"	3'6 1/2"	4'2 1/2"	4'10"	5'7"	4'8 1/2"	5'4 1/2"	6'0"	6'7 1/2"	7'7"	9'4"	11'0"
A ¹ — Overall length	5'9 1/2"	6'3 1/2"	6'9 1/2"	7'3 1/2"	6'11 1/2"	7'7 1/2"	8'0 1/2"	8'9 1/2"	7'11 1/2"	9'7 1/2"	10'3"	10'10 1/2"	12'2 1/2"	13'11 1/2"	15'7 1/2"
A ² — Overall length including tube removal	6'2 1/2"	7'2 1/2"	8'2 1/2"	9'2 1/2"	8'4 1/2"	9'8 1/2"	10'11 1/2"	12'5 1/2"	10'10 1/2"	12'2 1/2"	13'5 1/2"	14'9 1/2"	16'8 1/2"	20'2 1/2"	23'6 1/2"
FB — Overall width	3'5"	3'5"	3'5"	3'5"	3'8 1/2"	3'8 1/2"	3'8 1/2"	3'8 1/2"	4'4"	4'4"	4'4"	4'4"	5'4 1/2"	5'4 1/2"	5'4 1/2"
C — Overall height	5'3"	5'3 1/2"	5'3 1/2"	5'3 1/2"	6'0 1/2"	6'0 1/2"	6'2"	6'2"	6'11"	6'11 1/2"	7'0 1/2"	7'0 1/2"	7'10 1/2"	7'10 1/2"	7'10 1/2"
C ¹ — Shell height	4'7"	4'7"	4'7"	4'7"	5'2"	5'2"	5'2"	5'2"	5'11"	5'11"	5'11"	5'11"	6'5 1/2"	6'5 1/2"	6'5 1/2"
D — Boiler centerline to greatest width	2'0 1/2"	2'0 1/2"	2'0 1/2"	2'0 1/2"	2'2 1/2"	2'2 1/2"	2'2 1/2"	2'2 1/2"	2'6"	2'6"	2'6"	2'6"	3'1 1/2"	3'1 1/2"	3'1 1/2"
E — Rear fluebox depth	1'0 1/2"	1'0 1/2"	1'0 1/2"	1'0 1/2"	1'2 1/2"	1'2 1/2"	1'2 1/2"	1'2 1/2"	1'4 1/2"	1'4 1/2"	1'4 1/2"	1'4 1/2"	1'5 1/2"	1'5 1/2"	1'5 1/2"
F — Burner to front of boiler	2'2 1/2"	2'2 1/2"	2'2 1/2"	2'2 1/2"	2'8 1/2"	2'8 1/2"	2'8 1/2"	2'8 1/2"	2'0"	2'10 1/2"	2'10 1/2"	2'10 1/2"	3'2"	3'2"	3'2"
J — Boiler inside width	2'4 1/2"	2'4 1/2"	2'4 1/2"	2'4 1/2"	2'8 1/2"	2'8 1/2"	2'8 1/2"	2'8 1/2"	3'3 1/2"	3'3 1/2"	3'3 1/2"	3'3 1/2"	4'0"	4'0"	4'0"
K ¹ — Firebox length	2'1 1/2"	2'7 1/2"	3'1 1/2"	3'7 1/2"	3'1 1/2"	3'9"	4'5"	5'2"	4'3"	4'11"	5'6 1/2"	6'2"	7'0 1/2"	8'9 1/2"	10'5 1/2"
K ² — Firebox width	2'0"	2'0"	2'0"	2'0"	2'4"	2'4"	2'4"	2'4"	2'11"	2'11"	2'11"	2'11"	3'6"	3'6"	3'6"
K ³ — Firebox height	1'6 1/2"	1'6 1/2"	1'6 1/2"	1'6 1/2"	1'11"	1'11"	1'11"	1'11"	2'4"	2'4"	2'4"	2'4"	2'9"	2'9"	2'9"
L — Flue outlet diameter	6"	6"	6"	6"	8"	8"	8"	8"	10"	10"	10"	10"	12"	12"	14"
N — Flue outlet height															
— Rear outlet	3'0"	3'0"	3'0"	3'0"	3'5"	3'5"	3'5"	3'5"	3'11 1/2"	3'11 1/2"	3'11 1/2"	3'11 1/2"	4'3 1/2"	4'3 1/2"	4'3 1/2"
— Top outlet	3'6 1/2"	3'6 1/2"	3'6 1/2"	3'6 1/2"	4'1 1/2"	4'1 1/2"	4'1 1/2"	4'1 1/2"	4'9 1/2"	4'9 1/2"	4'9 1/2"	4'9 1/2"	5'1 1/2"	5'1 1/2"	5'1 1/2"
P — Supply size	4"	4"	4"	4"	4"	4"	4"	4"	6"	6"	6"	6"	8"	8"	8"
Q — Supply location	10"	10"	12"	14"	12"	15"	17"	110"	14"	16"	18"	20"	23"	3'2"	4'0"
R — Supply height	4'8"	4'8"	4'8"	4'8"	5'3 1/2"	5'3 1/2"	5'3 1/2"	5'3 1/2"	6'3 1/2"	6'3 1/2"	6'3 1/2"	6'3 1/2"	6'11"	6'11"	6'11"
S — Return location	7"	7"	7"	7"	7 1/2"	7 1/2"	7 1/2"	7 1/2"	7 1/2"	7 1/2"	7 1/2"	7 1/2"	7"	7"	7"
— Return size	3"	3"	3"	3"	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"
V — Safety valve location	1'6"	1'8"	1'10"	2'0"	1'10"	2'3"	2'5"	2'8"	2'4"	2'6"	2'8"	3'0"	3'9"	4'8"	5'6"
W — Normal waterline	3'10"	3'10"	3'10"	3'10"	4'5"	4'5"	4'5"	4'5"	5'1"	5'1"	5'1"	5'1"	5'5"	5'5"	5'5"
Y — Coil connection height (Optional)	3'11"	3'11"	3'11"	3'11"	4'6"	4'6"	4'6"	4'6"	5'2"	5'2"	5'2"	5'2"	5'6 1/2"	5'6 1/2"	5'6 1/2"
AA — Base length	2'9 1/2"	3'3 1/2"	3'9 1/2"	4'3 1/2"	3'9 1/2"	4'5 1/2"	5'1 1/2"	5'10"	4'11 1/2"	5'7 1/2"	6'3"	6'10 1/2"	8'0"	9'9"	11'5"
BB — Base width	2'8 1/2"	2'8 1/2"	2'8 1/2"	2'8 1/2"	2'8 1/2"	2'11 1/2"	2'11 1/2"	2'11 1/2"	3'8"	3'8"	3'8"	3'8"	4'6"	4'6"	4'6"
FF — Burner front to base	2'1"	2'1"	2'1"	2'1"	2'1"	2'1"	1'10 1/2"	1'10 1/2"	1'9"	2'9"	2'9"	2'9"	2'11 1/2"	2'11 1/2"	2'11 1/2"
GG — Standard gas train to base	6"	6"	6"	6"	7"	7"	8"	8"	8"	8"	10"	10"	10"	10"	12"
HH — Tube removal space	2'7 1/2"	3'1 1/2"	3'7 1/2"	4'1 1/2"	3'7 1/2"	4'3 1/2"	4'11"	4'11"	4'9 1/2"	5'5 1/2"	6'1"	6'8 1/2"	7'8"	9'5"	11'1"

*K-5.0-619 Top oval outlet 12" x 15" **150 lb. ANSI Flange †Add GG for increased width on gas and gas-oil units

DIMENSIONS, DATA SUBJECT TO CHANGE WITHOUT NOTICE

25D-5-9/87



101 Franklin Street, Kewanee, Illinois 61443
(309) 853-3541 • (309) 852-0424