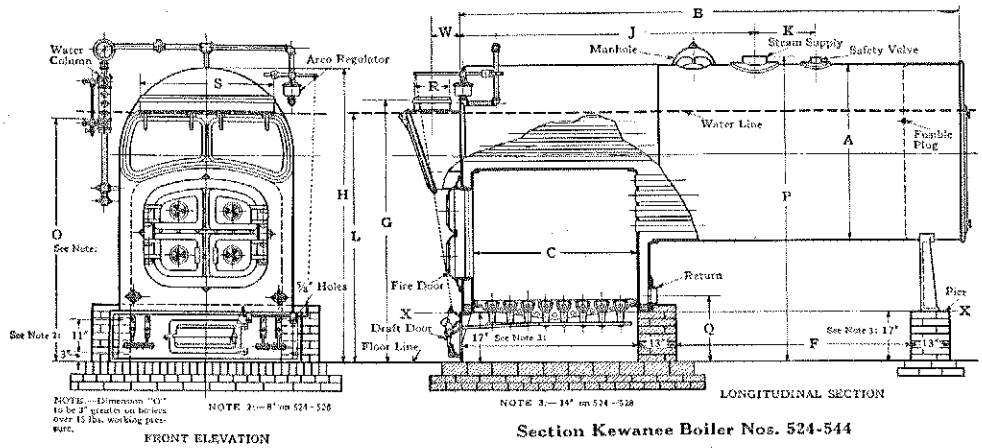
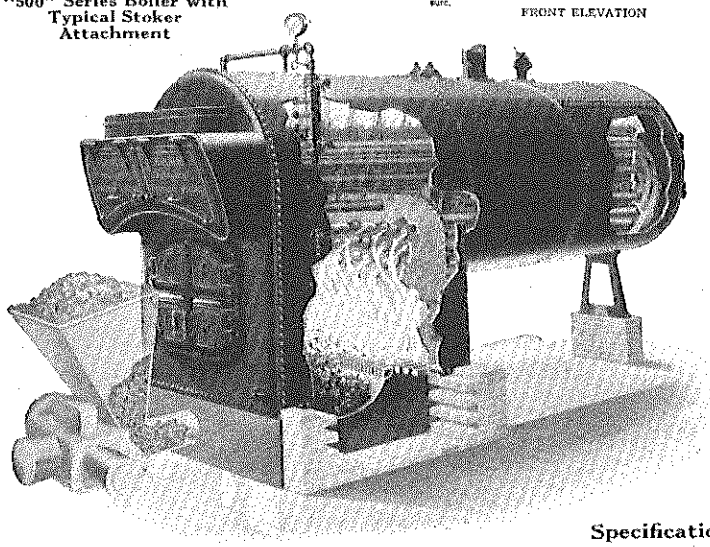
Kewanee Up-Draft Portable Boiler

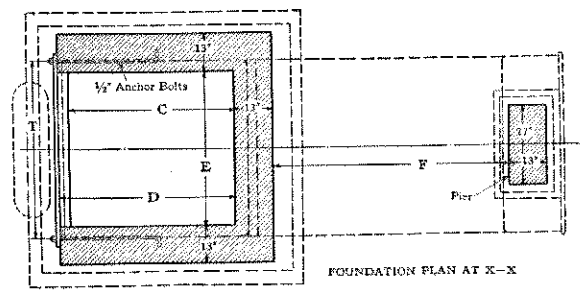
The high-class workmanship on Kewanee Boilers is proverbial in the Trade and in the Architectural profession. This "500" series reflects the best Kewanee practice based on generations of continuous experience.



Section Kewanee Boiler Nos. 524-544

"500" Series Boiler with Typical Stoker Attachment





Setting Plan and Foundation

In the "500" series Kewanee Steel-Riveted Boilers the grate area and firebox are enlarged somewhat and a greater number of return tubes is provided.

There is a corresponding increase in heating surface, steam space, disengaging area, furnace volume and water content, all in the correct ratio and proportionate to the requirements for definite service condition.

Specifications and Setting Measurements

Number of Boiler	524	526	528	530	532	534	536	538	540	542	544
Capacity, Steam, Sq. Ft.	7060	8770	10160	10310	13720	16380	18340	19460	21840	25540	28880
Capacity, Water, Sq. Ft.	11300	14030	16260	16500	21950	26210	29340	31140	34940	40860	46210
Capacity, Steam, Oil, Gas or Stoker, Sq. Ft.	10110	11390	12920	14650	16660	19890	22270	23630	26520	31010	35070
Furnace Volume, Oil, Gas or Stoker, Cu. Ft.	72.2	93.1	102.9	106.4	128.5	152.9	165.7	188.4	203.0	239.9	259.0
Approx. Weight, Oil, Gas or Stoker, Pounds	10150	11250	12100	13500	14900	18100	19300	20800	22300	24200	26300
Heating Surface, Sq. Ft.	600	670	760	862	980	1170	1310	1390	1560	1824	2063
Area of Grate, Sq. Ft.	18.2	20.8	22.7	22.9	27.2	30.5	32.8	36.1	38.8	39.5	42.5
Height of Firebox, Inches	44	49	49	49	49	52	52	54½	54½	55	55
Diameter of Breeching, Inches	24	26	26	28	28	30	32	34	34	36	36
Diameter of Stack, Inches	22	24	24	26	26	28	30	32	32	34	34
Minimum Height of Stack, Feet	60	65	70	80	80	80	90	80	95	85	95
Diameter of Breeching, Two Boilers, Inches	34	38	38	40	40	44	46	50	50	52	52
Diameter of Stack, Two Boilers, Inches	30	34	34	36	36	40	42	46	46	48	48
Min. Height of Stack, Two Boilers, Feet	70	75	80	90	90	90	100	90	105	95	105
Size of Steam Opening, Inches	6	8	8	8	8	8	8	8	10	10	10
Size of Return, Inches	4	5	5	6	6	6	6	6	6	6	6
Size of Safety Valve, Inches	2½	3	3	3	3½	4	4	2–2½	2–3	2–3	2–3
Diam. and Length Direct Tubes, Inches	3x78	4x65	4x73	4x87	4x97	4x90	4x103	4x84	4x97	4x102	4x119
Diam. and Length Return Tubes, Inches	3x143	3x130	3x144	3x153	3x175	3x168	3x187	3x168	3x187	3x186	3x209
Dia. Required to Open Flue Doors, Inches	28	32	32	32	32	35	35	37	37	40	40
Approximate Weight, Pounds	11160	12560	13550	15000	16640	20040	21500	23250	24870	26640	28870
A—Diameter of Boiler, Inches	54	60	60	60	60	66	66	72	72	78	78
B—Length of Boiler, Ft. In.	13–5	12–5	13–7	14–4	16–2	15–9	17–4	15–11	17–6	17–5	19–4
C—Length of Grate, Inches	62	62	68	62	74	74	80	80	86	80	86
D—Length of Ash-pit, Inches	66	66	72	66	78	78	84	84	90	84	90
E—Width of Ash-pit, Inches	42	48	48	53	53	59	59	65	65	71	71
F—Ash-pit Wall to Pier, Ft. In.	6–0	4–8	5–4	6–6	7–0	6–6	7–6	6–0	7–0	7–10	9–0
G—Height of Breeching Connection, Inches	80	88	88	90	90	93	93	100	100	101	101
H—Height of Boiler, Inches	89	98	98	101	101	107	107	113	113	115	115
J—Location of Steam Supply, Ft. In.	8–6	8–8	9–2	8–11	10–5	10–4	11–2	10–7	11–9	11–3	10–11
K—Location of Safety Valve, Inches	16	16	18	21	23	26	34	16	16	31	46
L—Height of Water-line, Inches	76	83	83	87	87	90	90	96	96	97	97
O—Height of Water Column, Inches	73½	81	81	84	84	87½	87½	93½	93½	94	94
P—Height of Steam Supply, Inches	90	99	99	103	103	109	109	115	115	117	117
Q—Height of Return, Inches	19	20	20	23	23	23	23	23	23	23	23
R—Width of Breeching Connection, Inches	10	12½	12½	12½	12½	15	15	17	17	17	17
S—Length of Breeching Connection, Inches	42	46	46	46	46	50	50	54	54	60	60
T—Ctr. to Ctr. Bolts in Ash-pit Front, In.	48	54	54	60	60	66	66	72	72	78	78
W—Boiler to Center of Breeching, Inches	8	9¼	9¼	9¼	9¼	10½	10½	11½	11½	11½	11½
*Number of Common Brick	540	560	590	710	770	790	820	850	880	885	930
Outside Surface to Cover, Sq. Ft.	185	190	220	250	280	290	310	315	345	385	425

*Foundations not included. **Rated Capacity for Water Boiler, 60% Greater than Steam.**