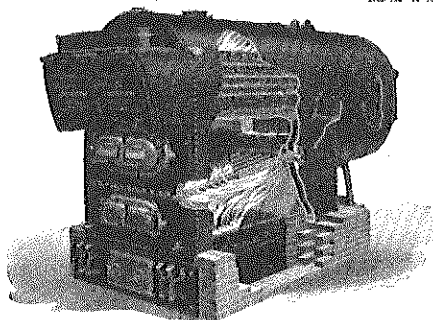
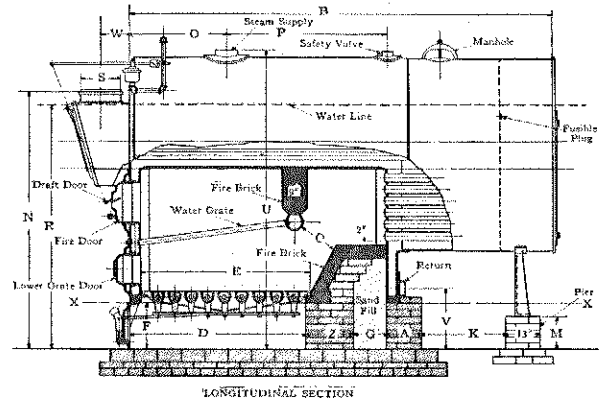
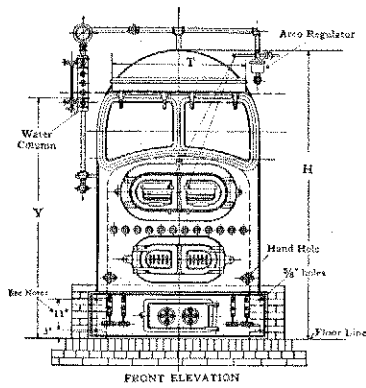
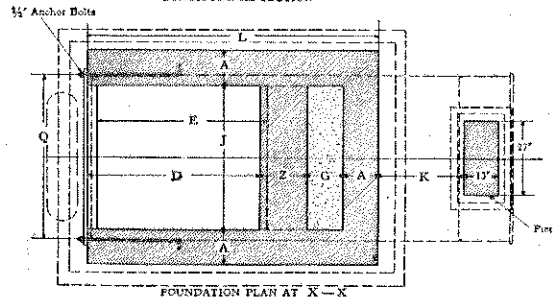


Kewanee Smokeless Portable Boiler "900" Series



Section Kewanee
Smokeless Bulldog
Boiler Setting Plan
and Foundation.
Boilers Nos. 932-943



Specifications and Setting Measurements

Number of Boiler.....	932	933	934	935	936	937	938	939	940	941	942	943
Capacity, Steam..... Sq. Ft.	7560	8840	10070	10810	12940	15260	17110	18300	20870	21760	29010	36790
Capacity, Water..... Sq. Ft.	12100	14140	16110	17300	20700	24420	27380	29280	33390	34820	46420	58860
Width of Boiler..... Inches	48	48	54	54	60	60	66	66	72	72	78	78
Area of Upper Grate..... Sq. Ft.	15	16.5	18.13	19.48	21.03	23.25	25.86	27.09	29.90	31.71	38.59	41.56
Heating Surface..... Sq. Ft.	592	644	719	772	924	1090	1222	1491	1554	2072	2628	2628
Approximate Weight..... Pounds	12100	12700	14600	15400	18000	19700	21900	22900	25800	26700	30700	35000
Length of Firebox..... Inches	78	84	84	90	90	96	96	102	102	108	114	120
Height of Firebox..... Inches	42	42	48	48	53	53	59	59	65	65	71	71
Height of Firebox..... Inches	44	44	49	49	49	49	52	52	54½	54½	55	55
Size of Steam Opening..... Inches	8	8	8	8	8	8	8	8	8	8	10	10
Size of Return Opening..... Inches	5	5	5	5	6	6	6	6	6	6	6	6
Size of Safety Valve Opening..... Inches	2½	3	3	3	3½	3½	4	4	2-2½	2-2½	2-3	2-3
Outside Surface to Cover..... Sq. Ft.	180	190	205	220	240	270	280	295	305	320	365	435
Diameter of Breeching, One Boiler..... Inches	26	26	28	28	30	32	34	34	36	36	40	42
Diameter of Stack, One Boiler..... Inches	24	24	26	26	28	30	32	32	34	34	38	40
Minimum Height of Stack, One Boiler..... Feet	60	60	65	65	65	70	70	70	80	90	90	100
Diameter of Breeching, Two Boilers..... Inches	38	38	40	40	44	46	50	50	52	52	56	56
Diameter of Stack, Two Boilers..... Inches	34	34	36	36	40	42	46	46	48	48	54	54
Minimum Height of Stack, Two Boilers..... Feet	70	70	75	75	75	80	80	80	90	100	100	110
A—Thickness of Foundation Walls..... Inches	9	9	9	9	13	13	13	13	13	13	13	13
B—Length of Boiler..... Ft. In.	11-8	12-6½	11-8½	12-5½	13-0	14-9	13-11	14-9	14-4	14-11	16-7	19-9
C—Header to Bridgewall..... Inches	12½	14	14	15	15	16	16	17	17	18	18	19
D—Length of Ash-pit..... Inches	56	62	62	68	63	69	69	75	75	75	81	87
E—Length of Grate..... Inches	55	61	61	67	61	67	67	73	73	73	79	85
F—Height of Ash-pit..... Inches	14	14	14	14	17	17	17	17	17	17	17	17
G—Bridgewall to Rear Wall..... Inches	12	12	12	12	13	13	13	13	13	13	19	19
H—Height of Boiler..... Inches	92½	92½	101	101	106	106	112½	112½	118	118	119½	119½
J—Width of Ash-pit..... Inches	43	43	49	49	53	53	59	59	65	65	71	71
K—Rear Wall to Pier..... Inches	32	36	28	31	33	49	36	41	34	34	48	81
L—Length of Foundation..... Inches	90	96	96	102	107	113	113	119	119	125	131	137
M—Height of Pier..... Inches	10½	10½	13½	13½	12	12	11½	11½	11	11	12½	12½
N—Height of Breeching Connection..... Inches	82	82	91	91	94	94	99	99	104	104	105½	105½
O—Location of Steam Supply..... Inches	25	26	36	35	35½	33½	30	32	32	30½	32	42
P—Location of Safety Valve..... Inches	55	59½	50	57	56½	65½	68	71	57½	66	69½	66
Q—Bolts Centers Ash-pit Front..... Inches	48	48	54	54	60	60	66	66	72	72	78	78
R—Height of Water-line..... Inches	78	78	87	87	91	91	96	96	101	101	102½	102½
S—Width of Smoke Neck..... Inches	14	14	14	14	15	15	17	17	19	19	21	21
T—Length of Smoke Neck..... Inches	38	38	42	42	50	50	54	54	54	54	60	60
U—Height of Steam Supply..... Inches	95	95	103	103	108	108	115	115	120	120	122	122
V—Height of Return..... Inches	20	20	20	20	23	23	23	23	23	23	23	23
W—Boiler to Center of Breeching..... Inches	10	10	10	10	10½	10½	11½	11½	12½	12½	13½	13½
Y—Height of Water Column..... Inches	76	76	85	85	88	88	93	93	98	98	99½	99½
Z—Thickness of Bridgewall..... Inches	13	13	13	13	18	18	18	18	18	18	18	18
*Number of Common Brick.....	625	650	1050	1075	1250	1300	1325	1375	1400	1475	1500	1575
Number of Fire Brick.....	155	155	185	185	190	190	220	220	230	230	290	290

*Foundation not included. Capacity for Oil, Gas or Stoker—Steam, 10060 to 44670 sq. ft.; Water, 60% Greater than Steam.