

Boilers

The Brownell Company Dayton, Ohio

SALES REPRESENTATIVES IN ALL SECTIONS OF THE COUNTRY

Steel Heating and Power Boilers, Feed Water Heaters, Tanks, Breechings, Stacks, Boiler Castings, Steel Plate Construction and Steam Engines.

Since 1855, when The Brownell Co. was established, this company has been manufacturing a complete line of High Grade Boilers and other equipment.

The Brownell Smokeless Firebox Boiler is designed and constructed to burn any kind of fuel economically and with-



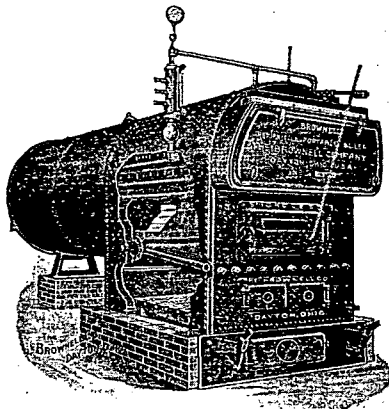
out smoke. Brownell Firebox Boilers are mechanically correct and insure long life. Brownell Heating Boilers have generous and properly designed fireboxes, permitting complete combustion and high efficiency.

Brownell ratings are very conservative, only the parts of

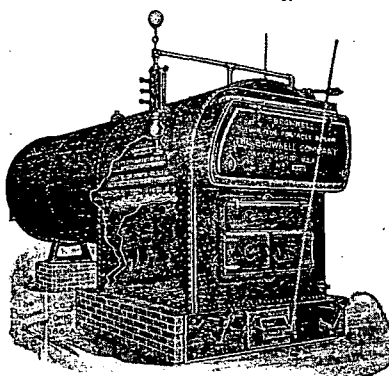
boiler below the normal water level and coming in actual contact with the hot gases being considered as effective heating surface.

Brownell Boilers will carry the number of square feet of direct radiating surface or equivalent given in opposite tables if sufficient radiation is installed to heat the building to the required temperature.

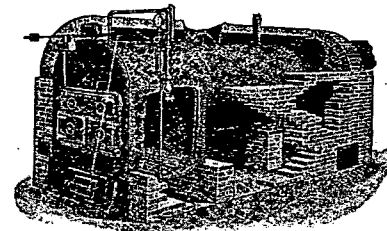
Brownell Firebox Heating Boilers are regularly built according to the A. S. M. E. Code for 15 lb. working pressure but will be furnished for pressures up to 100 lb. at an increased cost.



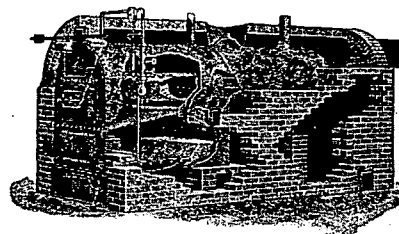
Brownell Return Flue Portable—Smokeless Type—Bulletin B-6A



Brownell Return Flue Portable—Direct Draft Type—Bulletin B-6A



Brownell Brick-set Firebox Boiler—Direct Draft Type
Bulletin B-6



Brownell Brick-set Firebox Boiler—Smokeless Type
Bulletin B-6

The Brownell Co.

Boilers

BROWNELL DIRECT DRAFT PORTABLE BOILERS

Boiler No.	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424
Capacity—Steam, Sq. Ft.	2500	2900	3500	4000	4500	5000	5500	6000	6500	7000	7500	8000	8500	9000	9500	10000	10500	11000
Capacity—Water, Sq. Ft.	4100	4800	5800	6600	7400	8300	9100	9900	10700	11500	12300	13100	13900	14700	15500	16300	17100	17900
Approximate Weight	6900	7400	8300	9000	9800	10600	11300	12100	12900	13700	14500	15300	16100	16900	17700	18500	19300	20100
Diam. of Boiler, In.	48	48	48	54	54	54	60	60	60	66	66	66	72	72	72	78	78	84
Length Boiler Overall, Ft., In.	8-6	9-6	10-6	10-0	11-0	12-0	12-6	13-6	14-0	15-6	15-8	17-8	17-8	17-10	19-10	20-0	20-0	22-0
Heating Surface, Sq. Ft.	293	333	373	427	487	537	614	670	698	781	936	1061	1224	1356	1539	1796	2227	2478
Size of Steam, In.	6	6	6	6	6	6	7	7	7	7	8	8	8	8	8	8	8	10
Size of Return, In.	4	4	4	4	4	4	5	5	5	5	6	6	6	6	6	6	6	8
Height of Water Line, In.	69	69	69	76	76	76	78	78	78	78	87	87	92	92	92	92	98	98
Height Floor to Top of Shell, In.	84	84	84	91	91	91	95	95	95	95	108	108	109	109	110	110	116	116
Space Required to Open Rear Doors, In.	25	25	25	28	28	28	30	30	30	30	35	35	37	37	40	40	43	43
Diam. Breeching, In.	22	22	22	24	24	24	26	26	26	28	30	32	34	34	36	36	38	40
Diam. Stack, In.	20	20	20	22	22	22	24	24	24	26	28	30	32	32	34	34	38	40
Min. Height Stack, Ft.	50	50	55	55	55	60	60	60	65	65	70	70	70	70	80	80	90	100
Diam. Breeching, 2 Boilers, In.	30	30	30	34	34	34	38	38	38	40	44	46	50	50	52	52	56	56
Diam. Stack, 2 Boilers, In.	28	28	28	31	31	31	34	34	34	36	40	42	46	46	48	48	54	54
Min. Height Stack, 2 Boilers, Ft.	60	60	65	65	65	70	70	70	75	75	80	80	80	80	90	100	100	100

BROWNELL SMOKELESS PORTABLE BOILERS

Boiler No.	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324
Capacity—Steam, Sq. Ft.	3000	3500	4000	4500	5000	5500	6000	6500	7000	7500	8000	8500	9000	9500	10000	10500	11000	11500
Capacity—Water, Sq. Ft.	5000	5800	6600	7400	8300	9100	9900	10700	11500	12300	13100	13900	14700	15500	16300	17100	17900	18700
Approximate Weight	7800	8600	9300	10400	11100	11900	12700	13500	14300	15100	15900	16700	17500	18300	19100	20000	20800	21600
Diam. of Boiler, In.	48	48	48	54	54	54	60	60	60	66	66	66	72	72	72	78	78	84
Length Boiler Overall, Ft., In.	8-7	9-10	10-10	10-7	11-7	12-7	12-7	13-7	15-1	16-1	17-9	17-9	18-8	18-8	18-8	20-4	20-4	24-1
Heating Surface, Sq. Ft.	307	381	405	472	526	579	631	687	766	822	922	1062	1255	1370	1529	1601	2090	2655
Size of Steam, In.	6	6	6	6	6	6	7	7	7	8	8	8	8	8	8	8	8	10
Size of Return, In.	4	4	4	4	4	4	5	5	5	5	6	6	6	6	6	6	6	8
Height of Water Line, In.	69	69	69	76	76	76	78	78	78	78	87	87	92	92	92	92	103	103
Height Floor to Top of Shell, In.	84	84	84	92	92	92	95	95	95	95	108	108	109	109	110	110	118	118
Space Required to Open Rear Doors, In.	25	25	25	28	28	28	30	30	30	30	35	35	37	37	42	42	44	44
Diam. Breeching, In.	22	22	22	24	24	24	26	26	26	28	30	32	34	34	36	36	40	40
Diam. Stack, In.	20	20	20	22	22	22	24	24	24	26	28	30	32	32	34	34	38	40
Min. Height Stack, Ft.	50	55	55	55	55	60	60	60	65	65	70	70	70	70	80	80	90	100
Diam. Breeching, 2 Boilers, In.	30	30	30	34	34	34	38	38	38	40	44	46	50	50	52	52	56	56
Diam. Stack, 2 Boilers, In.	28	28	28	31	31	31	34	34	34	36	40	42	46	46	48	48	54	54
Min. Height Stack, 2 Boilers, Ft.	60	65	65	65	65	70	70	70	75	75	80	80	80	80	90	100	100	100

BROWNELL DIRECT DRAFT BRICK-SET BOILERS

Boiler No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Capacity—Steam, Sq. Ft.	900	1050	1200	1400	1700	2000	2600	3000	3500	4000	4500	5500	6000	6500	7500	8700	10000	11000	12000	14000
Capacity—Water, Sq. Ft.	1500	1700	2000	2300	2800	3300	3300	4300	5000	5800	6600	7400	9100	10700	12400	14400	16500	18200	19800	23100
Approx. Shipping Weight	2800	3000	3200	3600	4200	4800	5200	5600	6000	6800	7800	8800	9700	11000	12600	14800	16600	18400	20000	24000
Diam. of Boiler, In.	30	30	30	36	36	36	42	42	42	48	48	54	54	60	60	66	66	72	72	72
Length Boiler Overall, Ft., In.	6-6	7-6	8-6	7-6	9-0	10-6	8-6	10-0	11-6	12-0	13-6	14-0	14-0	15-6	15-6	16-0	16-0	18-0	18-0	18-0
Heating Surface, Sq. Ft.	113	128	143	193	231	268	269	317	364	390	444	499	573	683	755	887	971	1097	1183	1343
Size of Steam, In.	3	3	3	4	4	4	4	6	6	6	6	7	7	7	7	8	8	8	8	8
Size of Return, In.	2 1/2	2 1/2	3	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	6
Height of Water Line, In.	53	53	53	59	59	59	61	61	61	65	65	65	67	67	75	75	80	80	85	85
Height Floor to Top of Brick Work, In.	70	70	70	77	77	77	83	83	83	90	90	90	96	96	108	108	114	114	120	120
Diam. Breeching, In.	12	14	16	16	18	18	20	20	20	22	24	24	28	28	32	32	32	32	36	36
Diam. Stack, In.	12	12	14	14	16	16	18	18	20	22	22	26	26	30	30	30	30	30	34	34
Min. Height Stack, Ft.	40	40	40	40	40	45	45	45	45	50	50	50	55	55	60	60	60	60	60	60
Diam. Breeching, 2 Boilers, In.	20	20	20	24	24	24	26	26	26	28	30	30	34	34	36	36	36	36	40	40
Diam. Stack, 2 Boilers, In.	20	20	20	24	24	24	26	26	26	28	30	30	34	34	36	36	36	36	40	40
Min. Height Stack, 2 Boilers, Ft.	50	50	50	50	50	50	50	50	50	55	55	60	60	60	60	70	70	70	70	70

BROWNELL SMOKELESS BRICK-SET BOILERS

Boiler No.	107	108	109	110	111	112	113	114	115	116	117	118	119	120
Capacity—Steam, Sq. Ft.	2600	3100	3600	4000	4700	5500	6500	7500	8500	10000	11500	13000	14500	16000
Capacity—Water, Sq. Ft.	4300	5100	5900	6600	7800	9100	10700	12400	14000	16000	18000	21000	23100	26400
Approximate Shipping Weight	6100	6700	7200	8400	9100	10800	12300	13600	15000	17000	19400	21000	22400	24300
Diam. of Boiler, In.	42	42	42	48	48	48	54	54	60	60	66	66	72	72
Length Boiler Overall, Ft., In.	9-10	11-4	12-11	12-4	13-10	15-4	15-10	17-10	18-4	20-4	22-4	24-4	26-4	28-4
Heating Surface, Sq. Ft.	309	359	409	448	506	563	643	756	851	987	1074	1204	1303	1468
Size of Steam, In.	6	6	6	6	6	6	7	7	7	8	8	8	8	8
Size of Return, In.	4	4	4	4	4	4	5	5	5	5	6	6	6	6
Height of Water Line, In.	61	61	61	65	65	65	67	67	75	75	80	80	86	86
Height Floor to Top of Brick Work, In.	82	82	82	89	89	89	95	95	107	107	113	113	119	119
Space Required to Open Rear Doors, In.	22	22	22	25	25	25	28	28	30	30	35	35	37	37
Diam. Breeching, In.	22	22	22	24	24	24	27	27	30	30	34	34	36	38
Diam. Stack, In.	20	20	20	22	22	24	24	28	28	32	32	34	34	36
Min. Height Stack, Ft.	50	50	50	50	55	55	60	60	60	62	62	64	64	66
Diam. Breeching, 2 Boilers, In.	28	30	30	34	34	34	38	38	40	42	42	44	44	46
Diam. Stack, 2 Boilers, In.	26	28	28	30	30	32	34	36	38	38	40	42	44	46
Min. Height Stack, 2 Boilers, Ft.	60	60	60	60	60	60	60	70	70	75	75	80	80	80