

Heggie-Simplex Boiler Co.

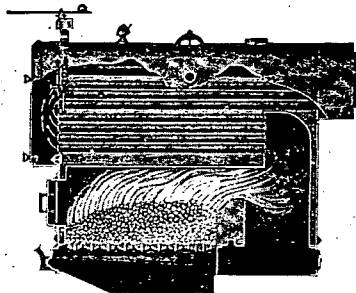
Joliet, Illinois



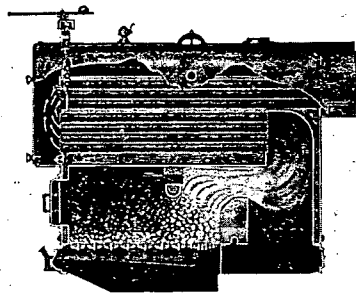
**Heating Boiler Division of James G. Heggie & Sons,
Manufacturers of Steel Boilers of all Kinds for over
Thirty-six Years**

Representatives in Principal Cities

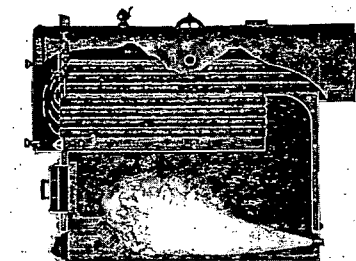
HEGGIE-SIMPLEX HEATING BOILERS



For Burning Soft Coal Smokelessly



For Soft or Hard Coal, Coke, Gas or Wood



For Burning Oil

During the thirty-six years covered by the activities of Jas. G. Heggie & Sons, boiler design has been perfected in its fundamentals. The Heggie-Simplex Boiler is the last step in this evolution. In it there is no compromise with traditional features. It is the embodiment of a scientific study of all known heating principles and requirements.

The Heggie-Simplex Boiler combines in one portable, electrically welded steel unit all the recognized advantages of both firebox and return tubular, double pass boilers. It has four distinctive features of fundamental importance:

1. An extra large firebox and a *maximum* of *direct* heating surface.
2. A secondary combustion chamber that provides ample room for complete combustion before the flues are reached.
3. A "rear-front-rear" flue passage for the gases.
4. A single, unimpeded, freely circulating body of water.

Correct heating principles find their most perfect expression in this boiler design. It secures as complete combustion of any fuel as ever has been attained in a heating boiler, with full application of its heat units.

Needless to say, Heggie-Simplex Boilers are more economical of operation than other types—in fuel consumption, number of firings, and ash handling. They are also economical of space, because of their compactness, the rear smoke outlet, and the front tube cleaning feature. No finer materials are used in any heating boilers, and none are fabricated more expertly or with greater care. While built to A. S. M. E. requirements, in a number of points they exceed these standards. They may be installed with unexampled ease, requiring no bricking, packing or other costly operations.

Heggie-Simplex Boilers are guaranteed to develop the capacities listed on the following pages, at the point of most economical fuel consumption. They are based upon a standard for steam of two pounds pressure at the boiler, and for water upon a mean temperature of 180 deg. fahr. as the water leaves the boiler.

Send for Catalog No. 26 to obtain more detailed information and specifications.

Heggie-Simplex Boiler Co.

HGGIE-SIMPLEX STEAM HEATING BOILERS

Number of Boiler—Direct Draft		*301	*302	*303	*304	*305	*306	*307	*308	*309	*310	*311	*312	*313	*314	*315	*316
Number of Boiler—Smokeless		100	108	111	112	113	114	115	116	117	118	119	120	121	122	123	124
Capacity		750	900	1050	1200	1450	1700	2000	2300	2600	3300	3700	4100	4500	5000	5500	6500
Heating Surface		sq. ft.	50	64	75	86	94	116	141	158	189	220	274	365	394	423	514
Grate Area		sq. ft.	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5
Height of Water Line		in.	48 1/2	55	55	55	55	55	55	55	55	55	55	55	55	55	55
Height of Boiler		in.	54	61 1/2	61 1/2	61 1/2	61 1/2	61 1/2	61 1/2	61 1/2	61 1/2	61 1/2	61 1/2	61 1/2	61 1/2	61 1/2	61 1/2
Width of Boiler		in.	24	27	27	27	27	27	27	27	27	27	27	27	27	27	27
Length of Boiler		in.	48	52	58	64	64	64	64	64	64	64	64	64	64	64	64
Diameter of Breeching		in.	10	14	14	14	14	14	14	14	14	14	14	14	14	14	14
Diameter of Stack—2 Boilers		in.	10	12	12	12	12	12	12	12	12	12	12	12	12	12	12
Minimum Height of Stack		ft.	30	40	40	40	40	40	40	40	40	40	40	40	40	40	40
Diameter of Breeching—2 Boilers		in.	16	18	18	18	18	18	18	18	18	18	18	18	18	18	18
Diameter of Stack—2 Boilers		in.	16	18	18	18	18	18	18	18	18	18	18	18	18	18	18
Minimum Height of Stack—2 Boilers		ft.	40	50	50	50	50	50	50	50	50	50	50	50	50	50	50
Size of Steam Outlet		in.	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Size of Return		in.	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Number of Safety Valves		in.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Boiler Covering Required		sq. ft.	33	41	46	51	52	62	73	78	89	101	116	123	133	141	144

HGGIE-SIMPLEX HOT WATER HEATING BOILERS

Number of Boiler—Direct Draft		*400	*403	*404	*405	*406	*407	*408	*409	*410	*411	*412	*413	*414	*415	*416	*417	*418	*419	*420
Number of Boiler—Smokeless		200	208	210	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227
Capacity		1000	1250	1500	1750	2000	2400	2800	3300	3900	4500	5450	6100	6750	7400	8250	9100	10700	11500	12300
Heating Surface		sq. ft.	152	160	176	193	197	206	215	230	240	250	270	293	314	337	361	390	420	420
Grate Area		sq. ft.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Height of Water Line		in.	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Height of Boiler		in.	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44
Width of Boiler		in.	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26
Length of Boiler		in.	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52
Diameter of Breeching		in.	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
Diameter of Stack		in.	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26
Minimum Height of Stack		ft.	30	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
Diameter of Breeching—2 Boilers		in.	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38
Diameter of Stack—2 Boilers		in.	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34
Minimum Height of Stack—2 Boilers		ft.	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80
Size of Steam Outlet		in.	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
Size of Return		in.	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
Number of Safety Valves		in.	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Boiler Covering Required		sq. ft.	152	160	176	193	197	206	215	230	240	250	270	293	314	337	361	390	420	420

HGGIE-SIMPLEX HOT WATER HEATING BOILERS

Number of Boiler—Direct Draft		*400	*403	*404	*405	*406	*407	*408	*409	*410	*411	*412	*413	*414	*415	*416	*417	*418	*419	*420
Number of Boiler—Smokeless		200	208	210	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227
Capacity		1000	1250	1500	1750	2000	2400	2800	3300	3900	4500	5450	6100	6750	7400	8250	9100	10700	11500	12300
Heating Surface		sq. ft.	152	160	176	193	197	206	215	230	240	250	270	293	314	337	361	390	420	420
Grate Area		sq. ft.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Height of Water Line		in.	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Height of Boiler		in.	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44
Width of Boiler		in.	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26
Length of Boiler		in.	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52
Diameter of Breeching		in.	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
Diameter of Stack		in.	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26
Minimum Height of Stack		ft.	30	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
Diameter of Breeching—2 Boilers		in.	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38
Diameter of Stack—2 Boilers		in.	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34
Minimum Height of Stack—2 Boilers		ft.	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80
Size of Steam Outlet		in.	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
Size of Return		in.	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
Number of Safety Valves		in.	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Boiler Covering Required		sq. ft.	152	160	176	193	197	206	215	230	240	250	270	293	314	337	361	390	420	420

HGGIE-SIMPLEX HOT WATER HEATING BOILERS

Number of Boiler—Direct Draft		*400	*403	*404	*405	*406	*407	*408	*409	*410	*411	*412	*413	*414	*415	*416	*417	*418	*419	*420
Number of Boiler—Smokeless		200	208	210	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227
Capacity		1000	1250	1500	1750	2000	2400	2800	3300	3900	4500	5450	6100	6750	7400	8250	9100	10700	11500	12300
Heating Surface		sq. ft.	152	160	176	193	197	206	215	230	240	250	270	293	314	337	361	390	420	420
Grate Area		sq. ft.	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Height of Water Line		in.	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Height of Boiler		in.	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44
Width of Boiler		in.	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26
Length of Boiler		in.	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52	52
Diameter of Breeching		in.	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
Diameter of Stack		in.	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26	26
Minimum Height of Stack		ft.	30	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
Diameter of Breeching—2 Boilers		in.	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38
Diameter of Stack—2 Boilers		in.	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34
Minimum Height of Stack—2 Boilers		ft.	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80
Size of Steam Outlet		in.	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
Size of Return		in.	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
Number of Safety Valves		in.	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Boiler Covering Required		sq. ft.	152	160	176	193	197	206	215	230	240	250	270	293	314	337	361	390	420	420

HGGIE-SIMPLEX HOT WATER HEATING BOILERS

Number of Boiler—Direct Draft		*400	*403	*404	*405	*406	*407	*408	*409	*410	*411	*412	*413	*414	*415	*416	*417	*418	*419	*420
Number of Boiler—Smokeless		200	208	210	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227
Capacity		1000	1250	1500	1750	2000	2400	2800	3300	3900	4500	5450	6100	6750	7400	8250	9100	10700	11500	12300
Heating Surface		sq. ft.	152	160	176	193	197	206	215	230	240	250	270	293	314	337	361	390	420	

NOTE.—All other measurements on Nos. 400 to 420 and on Nos. 207 to 220 are the same as on steam boilers Nos. 300 to 320. This boiler contains no bridge wall; grates completely fill the base.