NATIONAL RADIATOR CORPORATION

General Offices: **Johnstown, Pa.**

Branch Offices and Warehouses

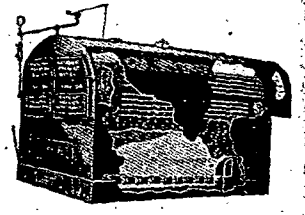
Baltimore	2622 Matthews St.	Milwaukee	2003 St. Paul Ave.
Boston	93-97 Oliver St.	New York	55 West 42nd St.
Buffalo	259 Delaware Ave.	Omaha	1101 Jackson St.
Chicago	2445 N. Keeler Ave.	Philadelphia	508 Liberty Trust Bldg.
Cincinnati	3530 Spring Grove Ave.	Pittsburgh	1509 Arrott Bldg.
Cleveland	935 East 63rd St.	Richmond	3032 Norfolk St.
Johnstown	221 Central Ave.	St. Louis	1042 Central Industrial St.
Lebanon, Pa.	Buttonwood St.	Toronto, Canada	672 Dupont St.
		Washington, D. C.	2205 Fifth St., N.E.

Manufacturers of

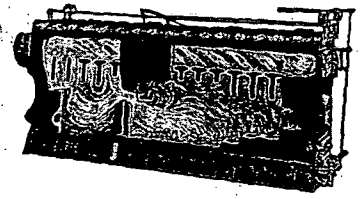
National Aero Radiators and Panel Radiators, National Bonded Round Boilers, Jacketed Boilers, Super-Smokeless Boilers, Novus and Imperial Sectional Boilers, Low Water Line Boilers, Contento Boilers, Gas Boilers and Premier Steel Boilers.

National Premier Steel Boilers

(Electric-Weld)



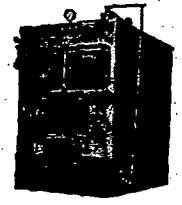
Built to the American Society of Mechanical Engineers' Boiler Code and rated in accordance with the Steel Heating Boiler Institute's Code for rating low pressure heating boilers. They contain three distinct features—recessed front smoke chamber, all-metal heat resisting arch, and detachable water-cooled steel bridge wall. Designed for anthracite or bituminous coal, coke, oil or gas fuel. Ratings 2,550 to 41,450 square feet of steam.



National Bonded Super-Smokeless Boiler

Distinguished for its swirling scarlet flame, this boiler is scientifically designed for the efficient and smokeless combustion of all grades of fuel. Secondary preheated air is distributed in small streams across the entire fire box.

Series	Bonded Radiation Load
No. 24	750 to 1,750 sq. ft. steam
No. 33	1,300 to 3,050 sq. ft. steam
No. 40	2,300 to 10,700 sq. ft. steam
No. 82	13,200 to 33,200 sq. ft. steam

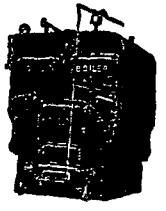


National Bonded Jacketed Square Boilers

Series	Bonded Radiation Load (sq. ft. steam)
No. 2	200 to 650
No. 3	480 to 840
No. 4	700 to 1,400

National Bonded Novus and Imperial Sectional Boilers

Series	Bonded Radiation Load (sq. ft. steam)
No. 20	480 to 840
No. 25	700 to 1,400
No. 32	1,200 to 2,400
No. 42	2,200 to 6,700
No. 48	3,500 to 7,000



National Aero Radiation

Height

3-tube—20", 23", 26", 30", 36"
4-tube—20", 23", 26", 30", 36"
5-tube—20", 23", 26", 30", 36"
6-tube—20", 23", 26", 32", 38"
7-tube—13½", 16½", 20", 26", 30", 36"

Push Nipple Construction

National Panel Radiation

Height

1-tube—17", 23"
2-tube—17", 23"
3-tube—17", 20", 23"
4-tube—17", 20", 23"
5-tube—17", 23"

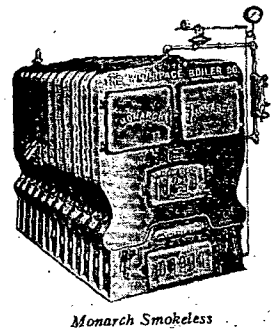
Push Nipple Construction

The Wm. H. Page Boiler Co.

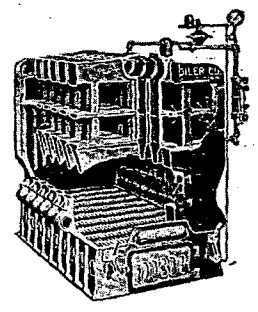
200 Madison Avenue, New York

Boston, 123 Beverly Street Philadelphia, 1126 Washington Avenue Meadville, Pa., Factory

Makers of Boilers for more than 70 Years



Monarch Smokeless



Monarch Water Tube

Monarch Sectional Steam and Water Boilers

No.	Rating Sq. Ft. Steam	*Load Sq. Ft. E.D.R. Steam	Rating Sq. Ft. Water	*Load Sq. Ft. E.D.R. Water	Area of Grate. Sq. Ft.	Height Overall Inches Steam	Width Overall Inches Steam	Height Overall Inches Water	Width Overall Inches Water	Length of Base, Inches	Water Line Inches Steam	Outlets and Inlets Inches
4-22	850	525	1400	840	3.06	59	39¼	52	35	27⅜	41	2-3
5-22	1075	675	1775	1080	4.03	59	39¼	52	35	33⅞	41	2-3
6-22	1300	825	2150	1320	5.00	59	39¼	52	35	39⅞	41	2-3
7-22	1525	975	2525	1560	5.98	59	39¼	52	35	46⅜	41	2-3
4-28	1600	950	2650	1520	4.82	70½	45¼	62¾	41	35⅜	51	2-5
5-28	2100	1275	3475	2040	6.45	70½	45¼	62¾	41	43⅜	51	2-5
6-28	2600	1600	4300	2560	8.07	70½	45¼	62¾	41	51¾	51	2-5
7-28	3100	1925	5125	3080	9.70	70½	45¼	62¾	41	60¼	51	2-5
8-28	3600	2250	5950	3600	11.32	70½	45¼	62¾	41	69	51	2-5
9-28	4100	2575	6775	4120	12.96	70½	45¼	62¾	41	77⅛	51	2-5
5-40	3400	2100	5600	3360	9.20	80	59¼	72½	55	43⅜	58	2-5
6-40	4200	2625	6925	4200	11.52	80	59¼	72½	55	51¾	58	2-5
7-40	5000	3150	8250	5040	13.85	80	59¼	72½	55	60¼	58	2-5
8-40	5800	3675	9575	5880	16.18	80	59¼	72½	55	69	58	2-5
9-40	6600	4200	10,900	6720	18.50	80	59¼	72½	55	77⅛	58	2-5
10-40	7400	4725	12,200	7560	20.82	80	59¼	72½	55	85¼	58	2-5
11-40	8200	5250	13,525	8400	23.13	80	59¼	72½	55	94	58	3-5
12-40	9000	5775	14,850	9240	25.50	80	59¼	72½	55	101⅞	58	3-5
6-60	6600	4300	10,900	6880	17.29	81½	86¼	74¼	82	51¾	60	2-6
7-60	8200	5350	13,525	8560	20.78	81½	86¼	74¼	82	60¼	60	2-6
8-60	9800	6400	16,175	10,240	24.27	81½	86¼	74¼	82	69	60	2-6
9-60	11,400	7450	18,800	11,920	27.76	81½	86¼	74¼	82	77⅛	60	3-6
10-60	13,000	8500	21,450	13,600	27.76	81½	86¼	74¼	82	85¼	60	3-6
11-60	14,600	9550	24,100	15,280	27.76	81½	86¼	74¼	82	94	60	3-6
12-60	16,200	10,600	26,725	16,960	31.25	81½	86¼	74¼	82	101⅞	60	3-6
13-60	17,800	11,650	29,375	18,640	31.25	81½	86¼	74¼	82	110¼	60	3-6
14-60	19,400	12,700	32,000	20,320	31.25	81½	86¼	74¼	82	118¾	60	3-6
15-60	21,000	13,750	34,650	22,000	34.74	81½	86¼	74¼	82	127½	60	3-6
16-60	22,600	14,800	37,300	23,680	34.74	81½	86¼	74¼	82	135⅝	60	3-6
17-60	24,200	15,850	39,950	25,360	34.74	81½	86¼	74¼	82	143¾	60	3-6
18-60	25 800	16 900	42,600	27,040	38.22	81½	86¼	74¼	82	152⅜	60	3-6
19-60	27,400	17,950	45,200	28,720	38.22	81½	86¼	74¼	82	160⅜	60	3-6
20-60	29,000	19,000	47,850	30,400	38.22	81½	86¼	74¼	82	168¾	60	3-6

Size of Smokepipe: 22-series, 13 inches; 28-series, 16 inches; 40-series, 21 inches; 60-series, 26 inches.

*Recommended loads are given in Equivalent Direct Radiation (240 B.t.u., steam—150 B.t.u., water). Base selection on the load to be attached to the boiler, including piping, expressed in Equivalent Direct Radiation.