

The Patterson-Kelley Co.

99 Park Avenue

New York City

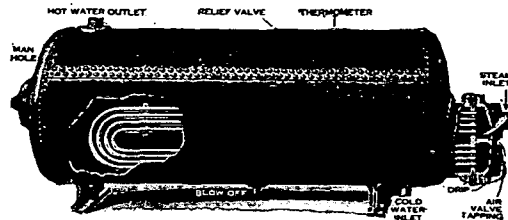
Hot Water Heaters for all purposes. Pool Heaters and Converters. Preheaters, Heat Exchangers, Heaters for Chemicals, Gases, Oils. Coolers for Brine, Chemicals, Gases, Oil and Water.

The Patterson Combined Hot Water Service and Storage Heater, Type B, is for any service where requirements for hot water are not constant, or where a large volume must be stored for sudden heavy demands.

We guarantee to furnish heaters that will deliver the quantity of hot water called for. Without obligation our Engineering Department will be glad to give engineers the benefit of our 52 years' experience.

General Specifications

Constructed like a high grade boiler—of heavy steel plate. Steam inlet and outlet chamber is a heavy, grey iron casting. Tube head is a heavy, steel forging into which both ends of each tube are expanded. Tubes are of pure, cold drawn seamless copper and "U" shaped to provide against contraction and expansion strains. Heater is for any service and in any required size per tables below. Write us for engineering advice.



HEATING CAPACITIES—

40° F. to 180° F.—Steam at Atmospheric Pressure

No.	Gallons per Hour	Approx. Wt. in Lb.	No.	Gallons per Hour	Approx. Wt. in Lb.
1H	100	200	15H	2000	700
2H	150	215	16H	2500	800
3H	200	235	17H	3000	900
4H	250	255	18H	3500	1050
5H	300	285	19H	4000	1200
6H	400	315	20H	4500	1350
7H	500	350	21H	5000	1500
8H	600	370	22H	6000	1750
9H	700	400	23H	7500	2000
10H	800	425	24H	10000	3200
11H	1000	450	25H	12500	3800
12H	1250	500	26H	15000	4500
13H	1500	550	27H	20000	5100
14H	1750	600	28H	25000	5800

Note.—To specify Type B. Heaters, combine the numbers of the required storage and heating capacities. For example, "One Patterson Type B. Heater with No. 22 S. and No. 17 H." has 1000 gallons storage with 3000 gallons hourly heating capacity.

STORAGE CAPACITIES

No.	Dimensions in Inches	Capacity in Gals.	Approx. Wt. in Lbs.	No.	Dimensions in Inches	Capacity in Gals.	Approx. Wt. in Lbs.
1 S	24 x 48	94	650	21 S	42 x 144	860	2450
2 S	24 x 60	118	750	22 S	42 x 168	1000	2800
3 S	24 x 72	141	850	23 S	42 x 192	1155	3100
4 S	24 x 84	164	950	24 S	48 x 96	750	2600
5 S	30 x 60	180	875	25 S	48 x 120	940	2925
6 S	30 x 72	215	1000	26 S	48 x 144	1125	3350
7 S	30 x 84	255	1150	27 S	48 x 168	1300	3840
8 S	30 x 96	285	1300	28 S	48 x 192	1500	4200
9 S	30 x 120	360	1500	29 S	54 x 120	1190	3500
10 S	36 x 72	310	1250	30 S	54 x 144	1425	3900
11 S	36 x 84	365	1400	31 S	54 x 168	1665	4300
12 S	36 x 96	415	1550	32 S	54 x 192	1900	4700
13 S	36 x 108	475	1700	33 S	60 x 120	1400	4300
14 S	36 x 120	500	1850	34 S	60 x 144	1700	4950
15 S	36 x 144	640	2100	35 S	60 x 168	2000	5600
16 S	42 x 72	430	1500	36 S	60 x 192	2240	6200
17 S	42 x 84	500	1650	37 S	72 x 174	3000	7000
18 S	42 x 96	575	1800	38 S	84 x 168	4000	8700
19 S	42 x 108	650	1950	39 S	96 x 168	5200	10000
20 S	42 x 120	720	2200	40 S	96 x 192	6000	11000

GRINNELL COMPANY, INC.

Heating, Industrial and Power Plant Piping, Fittings, Hangers, Valves, Pipe Bending, Welding, Piping Supplies, Etc.

Executive Offices: Providence, R. I.

Offices, Plants and Branches		
ALBANY, N. Y.	COLUMBIA, PENNA. (Plant)	NEW ORLEANS, LA.
ATLANTA, GA. (Plant and Foundry)	DALLAS, TEXAS	NEW YORK, N. Y.
AUBURN, R. I. (Plant and Foundry)	DETROIT, MICH.	PHILADELPHIA, PENNA. (Branch)
BALTIMORE, MD.	HARTFORD, CONN.	PITTSBURGH, PENNA.
BOSTON, MASS.	INDIANAPOLIS, IND.	PROVIDENCE, R. I. (Plant and Foundry)
BUFFALO, N. Y.	KANSAS CITY, MO.	ROCHESTER, N. Y.
CHARLOTTE, N. C. (Branch)	KEARNY, N. J. (Branch)	ST. LOUIS, MO. (Branch)
CHICAGO, ILL. (Branch)	MILWAUKEE, WIS.	ST. PAUL, MINN. (Branch)
CINCINNATI, OHIO	MINNEAPOLIS, MINN. (Branch)	WARREN, OHIO (Plant and Foundry)
CLEVELAND, OHIO (Branch)		
GRINNELL COMPANY OF THE PACIFIC		
LOS ANGELES, CAL. (Branch)	OAKLAND, CAL. (Branch)	SAN FRANCISCO, CAL. (Branch)
		SEATTLE, WASH. (Branch)
GRINNELL COMPANY OF CANADA, LTD.		
MONTREAL, QUE. (Branch)	VANCOUVER, B. C. (Branch)	TORONTO, ONT. (Plant and Foundry)
		WINNIPEG, MAN.
		OSHAWA, ONT. (Foundry)

PRODUCTS AND SERVICES—

Complete Service on materials to specification on Power Plant Piping, Industrial Piping, and Industrial Heating Systems; Fabricated piping including bends, welded headers, lap joints and the Grinnell Triple XXX line of products for Super Power; Grinnell Equiflo Valve; Grinnell Pipe Hangers and Fittings; Grinnell Thermolier (A Development in Unit Heaters); Thermoflex Heating Specialties.

Also Humidifying Systems; Constant Level Size Circulating Systems; Piping for acids and other special materials; Pipe Fabricating, Bending and Threading; Welding.

Brass, Bronze and other Castings; Valves: Air Relief, Globe, Angle, Cross, Check, Quick Opening and Closing, Non-return, Tank, Pressure Reducing and Regulating, Safety and Y.

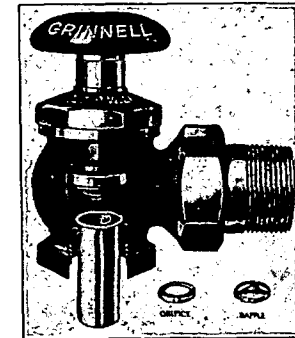
Pipe Bends and Coils; Unions, Tees, Elbs and Nipples; Cast Iron, Steel and Wrought Iron Pipe; Pipe Rolls; Steam Traps.

Automatic Sprinkler Systems.

For data on Thermoflex Heating Specialties, see page 790.

A Revolutionary Development in Forced Hot Water Heating—

One of the chief difficulties in the way of a broader use of forced hot water heating systems with their many important advantages has been the determination of pipe sizes by the complex and arduous method of calculating frictional resistances. Failure to do this, plus easily possible installation mistakes



Equiflo Valve

has resulted in many unsatisfactory installations of this type of heating system.

This whole problem has now been simplified by the invention of the Grinnell Equiflo Valve.

The Grinnell Equiflo Valve for forced hot water heating permits:

1. The calculation of pipe sizes for this system by simple tables, similar to those commonly used in connection with the design of vacuum steam systems.
2. Change in locations of radiators or piping during installation to take care of local construction conditions without recalculation of pipe sizes.

The Grinnell Equiflo Valve for forced hot water heating accomplishes:

1. More nearly perfect equalization of flow to every radiator than has ever been