

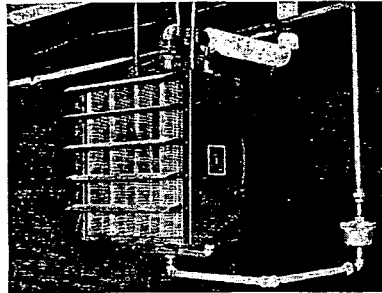
Armstrong Machine Works

352 Maple Street

Three Rivers, Mich.

District Sales Offices in 36 Cities

Exclusive Manufacturers of Armstrong Steam Traps



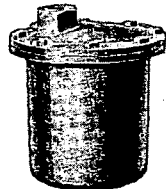
A No. 30 Armstrong Trap under Unit Heater

Armstrong Steam Traps

Armstrong steam traps are made in types and sizes to meet all condensate draining requirements. They are available for pressures up to 600 lb. pulsating pressures, high temperatures, acid conditions and for special services of all kinds. They are ideally suited for draining unit heaters, and steam heating systems.

Armstrong traps have many noteworthy advantages. They automatically discharge entrapped air with the condensate. They can not become air bound. They are positive in operation—the valve is either wide open or tightly closed—wire drawing and subsequent erosion of valves and seats are eliminated. Being water sealed at all times, no live steam can

escape. The unique construction gives a large capacity for a small size. Because of their small size, their cost is low and installation is a simple matter. No special fittings or supports are necessary. The sturdy construction and special wear-resisting parts insure long life and a minimum of maintenance.



No. 31

The Nos. 30 and 31 traps are especially adapted for low or high pressure radiation up to 125 and 150 lb. respectively. Their low cost permits free use. A trap on each unit insures perfect drainage. A thermic unit is incorporated in each trap which holds the valve open until the trap becomes hot. This assures rapid heating of equipment.



No. 30

The Nos. 2, 3 and 4 Armstrong Traps are the standard type for general service up to 300 lb. pressure.

The Nos. 30S to 4S Armstrong Traps are for service where there are pulsating pressures due to reciprocating engines and pumps drawing steam from a line.

For pressures up to 600 lb., steel bodies are used. The standard Armstrong Traps with steel bodies are designated as Nos. 42, 43 and 44. The special traps are numbered 42S, 43S and 44S. Traps for higher pressures can be furnished on special order.

In Regard to Capacities

Because of smaller valves and orifices, traps for high pressures have less capacity than the same trap for lower pressures. Always state maximum pressure when ordering steam traps.

SIZES AND CAPACITIES OF ARMSTRONG STEAM TRAPS

No.	Diam. In.	Height In.	Weight Lb.	Pipe Size, Inlet and Outlet In.	Capacities at 30-lb. Press.				Price List
					Linear Ft. 1-in. Pipe	Radiation Sq. Ft.	Gal. per Hour	Lb. per Hour	
30	5 3/4	4 1/2	5	1/2	1842	614	92	768	\$ 9.25
30 Special	5 1/4	8	11	1/2	1842	614	92	768	14.25
31	5 3/4	6 1/4	7 1/2	1/2	3234	1078	162	1348	15.00
31 Special	5 1/4	10	13 1/2	1/2	3234	1078	162	1348	20.00
2	6 1/4	10	18	3/4	7377	2459	370	3074	20.75
2 Special	6 1/2	13 1/4	32	3/4	7377	2459	370	3074	27.75
3	8 1/2	14	45	1 or 1 1/4	29514	9838	1481	12297	38.00
3 Special	8 1/2	18 1/2	67	1 or 1 1/4	29514	9838	1481	12297	45.00
4	10	17 1/4	74	1 1/2 or 2	51774	17258	2599	21572	70.00
4 Special	10	22	114	2	51774	17258	2599	21572	90.00

Write for discounts. See Catalogue E for capacities from 0 to 600-lb. pressure.



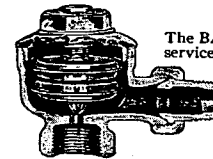
Barnes & Jones



128 Brookside Avenue, Jamaica Plain, Boston, Mass.

New York Office: 101 Park Avenue

Barnes & Jones Improved Modulation Vapor and Vacuum Systems of Steam Heating: Modulating Radiator Valves, Thermostatic Radiator Traps, Thermostatic Traps for medium and high pressures, Condensators (Boiler Return Traps), Blast Traps, Drip Traps, Vent Traps, Strainers, Damper Regulators, Gages.



Barnes & Jones Service

The BARNES & JONES organization offers an advisory and consulting service believing that the manufacturer of a heating system often is in the best position to give practical assistance in the solution of heating problems. On request, members of our staff will consult with and advise engineers, contractors or users as to the most advantageous manner in which BARNES & JONES apparatus can be installed and operated or adapted to special installations. When desired, our Service Department will furnish



Installation details and work with engineers, contractors or users to gain the best results in installation or operation.

Factory Tested

Each and every appliance used in the BARNES & JONES Modulation Vapor and Vacuum Heating Systems is tested, inspected and adjusted at our own factory before shipment, to meet all the conditions which 30 years' experience in the development of heating apparatus have shown us are likely to arise.

Barnes & Jones Modulation Valves

Sizes and Models—Made in the angle type, in sizes from 1/2 to 1 1/2 in. Standard model has lever handle. Has renewable disc seat.

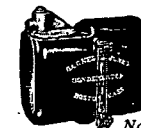
Size Valve, Inches	Capacity, Sq. Ft.
1/2	30
3/4	60
1	100
1 1/4	180
1 1/2	250

Barnes & Jones Condensators

For returning the water of condensation to the boiler from open return line systems independently of boiler pressure, without any change in operating conditions, and without air binding, or admitting steam to the return side of the system.



No. 1



No. 2

Barnes & Jones Vent Traps

The air from a BARNES & JONES Vapor System is discharged to the atmosphere through a BARNES & JONES Vent Trap. This vent trap is equipped with a float valve to prevent the discharge of water and also with a ball check valve which allows the free discharge of air but prevents its return into the system, thus enabling BARNES & JONES Vapor Systems to operate in many cases under vacuum conditions, with a resultant saving in fuel.



Vent Trap

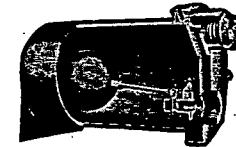
Barnes & Jones Thermostatic Radiator Traps

This valve is made in 1/2, 3/4, 1 and 1 1/2-in. sizes. The 1/2-in. size is made in four types: angle, straightway, right-hand corner and left-hand corner patterns. The 3/4, 1 and 1 1/2-in. sizes are made in the angle and straightway patterns. The 1/2-in. size unless otherwise specified is made with 3/4-in. outlets, thus avoiding the use of all 1/2-in. pipe and reducing fittings.

Size Valve, Inches	Water per Hour, Lb.	Sq. Ft. Coils	Sq. Ft. C.I. Radiation
1/2	30	100	125
3/4	80	240	320
1	200	600	800
1 1/4	400	1200	1600

Barnes & Jones Blast Traps

Combination float and thermostatic traps with an air and water capacity large enough to take care of the condensation from the largest vent stacks, dry kiln coils, hot water heaters and other units condensing large quantities of steam at low pressures.



Blast Trap

Size Trap, Inches	Capacity, Lb. Water per Hour
3/4	600
1	1000
1 1/4	2000
1 1/2	3000
2	4000
2 1/2	5000