

Armstrong Machine Works

851 Maple Street

Three Rivers, Mich.

Exclusive Manufacturers of Armstrong Inverted-Bucket Steam Traps

ARMSTRONG

Atlanta, Ga., J. M. Tull Metal & Supply Co., Inc., 285 Marietta St., N.W.
 Baltimore, Md., Milby & McKinney, 218 Water St.
 Birmingham, Ala., Southeastern Products Co., 1401 Lomb Ave.
 Boston, Mass., Files Steam Specialty Co., 261 Franklin St.
 Buffalo, N. Y., Herr Steam Specialty Co., 360 Warwick Ave.
 Charleston, W. Va., Baldwin Supply Co., 518 Capitol St.
 Chicago, Ill., Barrett-Christie Co., 108-112 N. Clinton St.
 Dallas, Texas, Geo. B. Allan & Co., North Texas Bldg.
 Denver, Colo., Hendrie-Bolthoff Mfg. & Supply Co., 1637-17th St.
 Des Moines, Iowa, E. B. Carr, 627 Insurance Exchange Bldg.
 Detroit, Mich., A. F. Squier, 2081 Blaine Ave.
 Duluth, Minn., John E. Smith, 1721 W. Michigan St.
 Erie, Pa., Coblenz Equipment Co., 1119 Peach St.
 Evansville, Ind., Evansville Supply Co., Esco Bldg.
 Fond du Lac, Wis., A. N. Goff, 94 Eighth St.
 Honolulu, T. H., The von Hamm-Young Co., Ltd.
 Indianapolis, Ind., Indiana Belting & Supply Co., 34 S. Capitol Ave.
 Kansas City, Mo., Hughes Machinery Co., 342 Mrs. Exchange Bldg.
 Knoxville, Tenn., Leinart Engineering Co., 427 Walnut St.
 Los Angeles, Calif., Guy L. Warden, 114 West 17th St.
 Louisville, Ky., Graft-Pelle Co., 116 N. Third St.
 Memphis, Tenn., The Power Equipment Co., 1352 Madison Ave.



REPRESENTATIVES

Milwaukee, Wis., Hamacher & Williams, 2540 W. Wells St.
 Minneapolis, Minn., Albert C. Price Co., 257 Fourth Ave.
 Montreal, Quebec, Engineering Equipment Co., Ltd., 620 Cathcart St.
 New Orleans, La., Louisiana Steam Equipment Co., 109 Tchoupitoulas St.
 New York, N. Y., Advance Engineering Co., 69 Dey St.
 Philadelphia, Pa., Brogan & Co., 810 Race St.
 Phoenix, Ariz., John W. Ladlow, Box 1784.
 Pittsburgh, Pa., R. S. Eastman Co., 222 First Ave.
 Portland, Ore., J. C. Ross & Co., 917 S.W. Oak St.
 Richmond, Va., A. T. Shepherd, 411-12 Tenth St. Bldg.
 St. Louis, Mo., O'Brien Equipment Co., 2726 Locust Blvd.
 Salt Lake City, Utah, Mfrs. Sales & Service Co., 144 S. Fifth West St.
 San Francisco, Calif., Refrigerating & Power Specialties Co., 380 Brannon St.
 Seattle, Wash., J. C. Ross & Co., 2434 First Ave. S.
 South Bend, Ind., Smith-Monroe Co., 1912 S. Main St.
 Spokane, Wash., R. A. Halstead, P. O. Box 1359.
 Syracuse, N. Y., The Hopton Co., 321 Denison Bldg.
 Tampa, Fla., G. W. Neale, 504 E. LaFayette St.
 Toronto, Ont., Arthur S. Leitch Co., Ltd., 1123 Bay St.
 Vancouver, B. C., General Equipment, Ltd., 410 Homer St.
 Winnipeg, Man., Kipp-Kelly, Ltd., 68 Higgins Ave.
 Wooster, Ohio, Steam Economies Co., 1011 Beall Ave.

Armstrong traps are offered in two types for heating service, "standard" traps and "blast" traps. Standard traps are used for drip headers and unit heaters where little air is to be handled. Where large volumes of air must be removed quickly the blast trap is available.

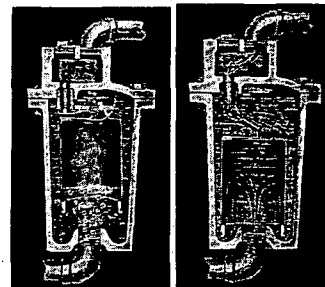
The "Blast" Type Trap—For fast handling of large quantities of air, the standard Armstrong trap can easily be furnished as a "blast" type trap by the use of a thermic bucket. The air handling capacity of this bucket is approximately 100 times as great as with the regular air vent. As long as the trap is cold a large vent in the top of this bucket remains open, and it is impossible for the bucket to float and close the valve with this vent

open. As soon as the air has been eliminated and steam comes to the trap, the heat bends the strip of thermic metal supporting a flat disc which closes the large vent. Thereafter, the trap functions in the normal manner. This thermic bucket can be supplied in any size Armstrong trap. The table on the following page gives the prices for traps so equipped.

Avoid Steam Trap Troubles—The customary troubles with steam traps are leaky valves, air-binding and plugging up with dirt or oil. The intermittent action of this trap and the metal used in the valves stop scoring and wire-drawing, the common sources of leakage. Air-binding is impossible because the air passes out of the bucket ahead of the steam through the

HOW THE ARMSTRONG STEAM TRAP WORKS

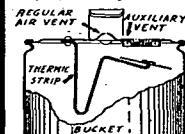
The Standard Trap



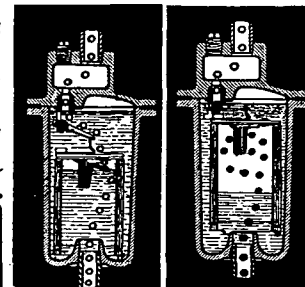
LEFT:
Standard trap (1) closed and (2) discharging.

BELOW:
Thermic bucket in blast trap.

RIGHT:
Blast trap (1) discharging air, (2) closed by steam.



The "Blast" Trap



vent at the top. When the trap is discharging, the flow of water under the bottom of the bucket prevents the accumulation of any dirt or sediment.

Simplicity—The Armstrong Steam Trap has only two moving parts—the valve lever assembly and the inverted bucket. Friction is practically eliminated in this mechanism. All wearing parts are made from nickel chrome steel except the discharge valve and seat which are made from a special chrome steel heat treated after machining to obtain maximum hardness and toughness. Many years of service without maintenance expense is the customary experience of Armstrong trap users.

Large Capacity—Discharge orifices

used in Armstrong traps are very large in proportion to the size of the pipe connections.

Armstrong trap capacity ratings are not theoretical but show actual test capacities when handling condensate at steam temperature. The effect of flash steam and pipe friction to and from the trap is thus automatically taken into consideration.

Service Organization—The satisfactory operation of all Armstrong traps is assured by 44 district representatives in the United States, Canada and Hawaii. Stocks of these traps are carried in nearly 100 leading cities. We will gladly put you in touch with your nearest representative and see that any traps you need are supplied promptly.

Sizes, Capacities and List Prices of Armstrong Traps

Trap Size	No. 200 and 201	No. 211	No. 212	No. 213	No. 214	No. 215	No. 216
Pipe Connections	1/2" or 3/4"	1/2"	1/2" or 3/4"	1/2" or 3/4"	1"	1" or 1 1/4"	1 1/2" or 2"
List Price (Regular)	\$7.00	\$9.25	\$15.00	\$20.75	\$29.00	\$38.00	\$55.00
List Price (Blast Trap)	\$8.50	\$10.75	\$17.00	\$22.75	\$31.50	\$40.50	\$60.00
Telegraph Code (Regular)	Acacia Acanthus Acacia	Aspen	Birch	Walnut	Hemlock	Larch	Tamarack
Telegraph Code (Blast Trap)	Acacia Acanthus Acacia	Aspen	Birch	Walnut	Hemlock	Larch	Tamarack
Height	4"	6 3/4"	8"	10 1/4"	12 1/4"	14"	16 3/4"
Diameter	4 1/4"	4 1/4"	5"	6 3/4"	7 1/4"	8 1/4"	10 3/4"
Weight	3 1/4 Lb.	5 1/2 Lb.	10 1/2 Lb.	19 Lb.	32 Lb.	47 Lb.	76 Lb.
Maximum Pressure	125	200	200	250	250	250	250
Continuous discharge capacity in lbs. of water per hour at pressure indicated. For more complete information, see the Capacity Chart in the Armstrong Steam Trap Book.	5 10 15 20 25 30 40 50 60 70 80 90 100 125 150 300 250	450 560 640 690 740 800 840 880 940 990 1040 1090 1140 1190 1240 1290	840 1000 1080 1180 1280 1380 1480 1580 1680 1780 1880 1980 2080 2180 2280 2380	1560 1900 2060 2180 2300 2420 2540 2660 2780 2900 3020 3140 3260 3380 3500 3620	3000 3500 3900 4100 4300 4500 4700 4900 5100 5300 5500 5700 5900 6100 6300 6500	4600 5600 6300 6900 7500 8100 8700 9300 9900 10500 11100 11700 12300 12900 13500 14100	7600 9100 10,000 10,800 11,600 12,400 13,200 14,000 14,800 15,600 16,400 17,200 18,000 18,800 19,600 20,400