

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, 118 Light 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, 307 Securities Bldg.
 Detroit, Mich., A. F. Squier, 2910 National Ave.
 Duluth, Minn., John E. Smith, 1720 W. Superior 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., Indianapolis Belting & Supply Co., 34 S. Capitol Ave.
 Kansas City, Mo., Hughes Machinery Co., 342 Mrs. Exchange Bldg.
 Knoxville, Tenn., Leinart Engineering Co., 311 W. Cumberland Ave.
 Los Angeles, Calif., Guy L. Warden, 114 West 17th St.
 Louisville, Ky., Graft-Pelle Co., 309 W. Main St.
 Memphis, Tenn., The Power Equipment Co., 1352 Madison Ave.

Armstrong offers two types of traps for heating, air conditioning, and steam distribution service.

Standard Inverted Bucket Traps, the type originated by Armstrong, are *non-airbinding* and *self-scrubbing*. They are used for low, medium, and high pressure duty where relatively little air must be handled along with the condensate. Their free-floating lever design makes it possible to open very large discharge orifices compared with the size and weight of the trap itself.

Armstrong Blast Traps are used where large amounts of air must be vented quickly when steam is first turned on. The Armstrong Blast Trap (illustrated on next page) consists of a standard inverted bucket trap with a large auxiliary air vent

REPRESENTATIVES

Milwaukee, Wis., Hamacher & Williams, 2540 W. Wells St.
 Minneapolis, Minn., Albert C. Price Co., 257 Fourth Ave., South.
 Montreal, Quebec, Preston, Phipps Inc., 955 St. James St. W.
 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., Heating and Ventilating Equipment Co., 927 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, Lee, Pace & Turpin, 144 S. Fifth West St.
 San Francisco, Calif., Refrigerating & Power Specialties Co., 380 Brannon St.
 Seattle, Wash., Heating & Ventilating Equipment, Inc., 500 First Ave., South.
 South Bend, Ind., Smith-Monroe Co., 1912 S. Main St.
 Syracuse, N. Y., The Hopton Co., 321 Denison Bldg.
 Tampa, Fla., G. W. Neale, 404 Morgan St.
 Toronto, Ont., Arthur S. Leitch Co., Ltd., 1123 Bay St.
 Vancouver, B. C., General Equipment, Ltd., 319 W. Pender St.
 Winnipeg, Man., Kipp-Kelly, Ltd., 68 Higgins Ave.
 Wooster, Ohio, Steam Economies Co., 1011 Beall Ave.

controlled by a piece of rustless thermostatic bi-metal. When the trap is cold, the auxiliary vent is wide open, allowing air and condensate to blow right through the trap. When steam reaches the trap, the auxiliary vent closes, allowing the bucket to float and close the main valve after the condensate has been discharged.

The Armstrong Blast Trap has several advantages over the conventional float and thermostatic trap.

1. The Armstrong Blast Trap has but a *single orifice* to be maintained tight against the full pressure differential. The pressure differential across the auxiliary air vent amounts to only 1 in. to 4 in. of water.

2. *Positive action.* The discharge valve in an Armstrong Blast Trap is either wide

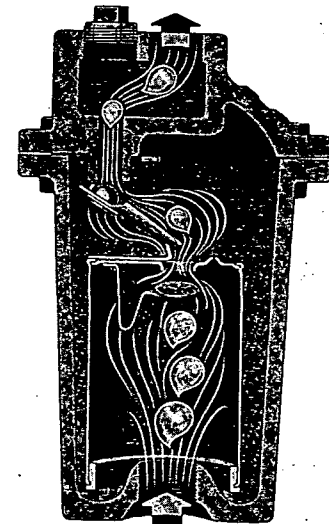
open or tight shut. Fast opening and fast closing prevent wire-drawing.

3. *Handles dirt.* There are no dead spots in an Armstrong Trap in which dirt can settle and interfere with the operation of the trap. No blow-down valves are necessary and ordinarily no strainers are required ahead of Armstrong Traps.

4. The wearing parts in all Armstrong Traps are identical in design, material, and precision workmanship with parts used in Armstrong Forged Steel Traps for pressures up to 1500 lb gage and total temperatures of 850 F. At ordinary heating pressures, Armstrong Traps last many years without any maintenance expense whatever.

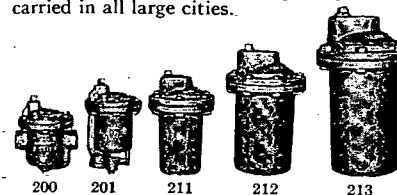
Armstrong Steam Trap Book. This 32 page book gives complete information on all sizes and types of Armstrong Traps. It also contains 15 pages of data on the subject of trap selection, installation, and maintenance. A free copy will be mailed on request.

Service Organization. Satisfactory selection and operation of all Armstrong Traps is assured by 43 district representatives in the United States, Canada, and Hawaii. Stocks of Armstrong Traps are carried in all large cities.



THE ARMSTRONG BLAST TRAP

The above picture shows how the Armstrong Blast Trap works when steam is first turned on. Note that the auxiliary vent in the top of the bucket is wide open. Air and water are free to rush straight through until steam comes in and causes the bi-metal strip to bend upward closing the auxiliary vent with the small flat disc. Thereafter it works the same as the standard trap.



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"	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).....	Aspen	Birch	Walnut	Hemlock	Larch	Tamarack	
Telegraph Code (Blast Trap).....	Aspen	Birch	Walnut	Hemlock	Larch	Tamarack	
Height.....	4 1/4"	6 1/4"	8"	10 1/4"	12 1/4"	14"	16 1/2"
Diameter.....	4 1/4"	6 1/4"	8"	10 1/4"	12 1/4"	14"	16 1/2"
Weight.....	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 lb 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 30 40 50 60 70 80 90 100 110 125	450 560 640 690 890 970 1040 1140 1240 1340 1440 1540 1640	840 1000 1080 1200 1300 1400 1500 1600 1700 1800 1900 2000 2100	1560 1900 2060 2200 2300 2400 2500 2600 2700 2800 2900 3000 3100	3000 3500 3900 4100 4300 4500 4700 4900 5100 5300 5500 5700 5900	4600 5600 6300 6900 7500 8100 8700 9300 9900 10,500 11,100 11,700 12,300	7600 9100 10,000 10,900 11,800 12,700 13,600 14,500 15,400 16,300 17,200 18,100 19,000
*If 3/4 in. connections are desired, order No. 202 for straight way or No. 203 for angle.	150 200 250	820 900	1530 1680	3500 3200	5900 5400	9500 8500	18,600 17,400