

The Smolensky Valve Co., Inc.

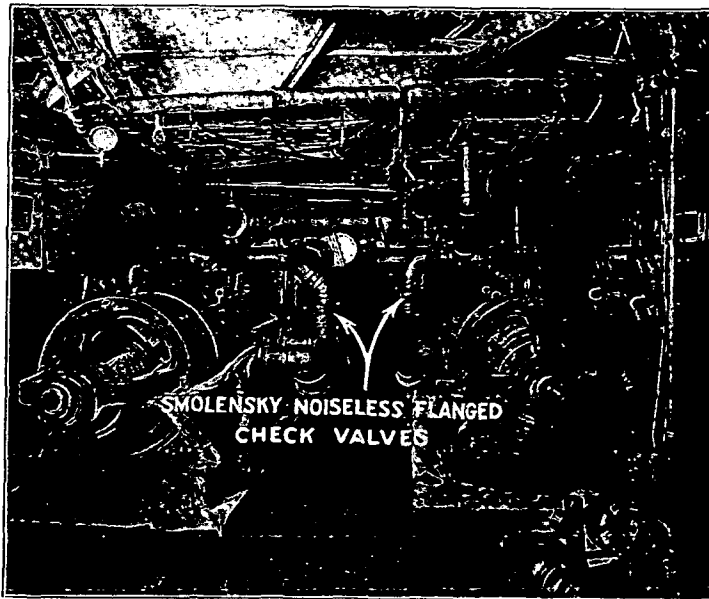
Cleveland, Ohio

Branch Offices

CHICAGO, ILL., 1307 Security Bldg. H. T. SWARD, Dist. Mgr.
 NEW YORK, N. Y., Grand Central Palace. C. A. McMANN, Dist. Mgr.
 PHILADELPHIA, PA., 509 Franklin Trust Bldg. H. L. SCHWARTZ
 HARTFORD, CONN., J. B. ENGR. SALES CO.
 SAN FRANCISCO, CAL., Rialto Bldg. KIRK W. EICHELBERGER

SMOLENSKY VALVES

FOR EVERY HEATING PURPOSE—EFFICIENT—ECONOMICAL—DURABLE



View Showing Centrifugal Pumps with Smolensky Noiseless Check Valves

LIST PRICES

STANDARD SMOLENSKY REGRINDING PACKLESS VALVES

Sizes (Woodwheel Type)	Inches	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
Finished and Plated All Over	Each	\$2.30	2.70	3.45	4.50	5.90	8.95
Dimensions—A	Inches	2 1/4"	2 1/2"	2 3/4"	2 3/4"	3"	3 1/4"

Sizes (Cast Iron Wheel)	Inches	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	3"
Screwed Ends	Each	\$1.45	1.50	1.65	2.04	2.75	3.60	4.90	7.20	12.80
Dimensions—A	Inches	2 1/4"	2 1/4"	2 1/4"	2 1/2"	2 1/2"	2 3/4"	3"	3 1/4"	3 1/2"

STANDARD AND EXTRA HEAVY SMOLENSKY NOISELESS CHECK VALVES

Sizes (125 lb. pressure)	Inches	2"	2 1/2"	3"	4"	5"	6"	7"	8"	9"	10"	12"	14"	16"
Flanged	Each	\$25.00	29.00	30.00	39.00	63.25	85.95	103.97	130.70	190.00	230.00	310.00	450.00	520.00
Dimensions Face to Face In.		2 1/4"	2 1/2"	2 1/2"	2 1/2"	3 1/4"	4 1/2"	5 1/4"	6"	6 1/2"	7 1/4"	8 1/2"	10 1/2"	12 1/4"

Sizes (250 lb. pressure)	Inches	2"	2 1/2"	3"	4"	5"	6"
Flanged	Each	\$16.35	28.25	31.50	39.80	49.00	69.86
Dimensions, Face to Face	Inches	2"	2 1/4"	2 1/4"	2 1/4"	2 1/4"	4 1/2"

STANDARD SMOLENSKY REGRINDING PACKLESS RADIATOR VALVES

Sizes	Inches	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
Finished, Plated all Over, Screwed Ends	Each	\$3.75	3.80	4.00	6.40	8.70	13.70
Dimensions—A	Inches	3"	3 1/4"	3 1/4"	3 1/4"	4"	4 1/4"

LIBERAL TRADE DISCOUNTS FROM LIST PRICES

American Larson Ventilating Co.

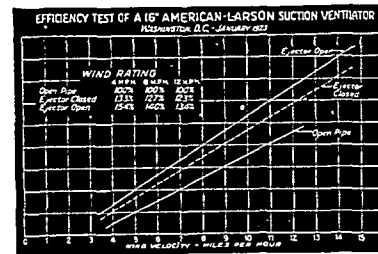
Main Office: PITTSBURGH, PA.

Product: American-Larson Rotary Suction Ventilators—proven, by competitive tests, to be the most efficient ventilator on the market.

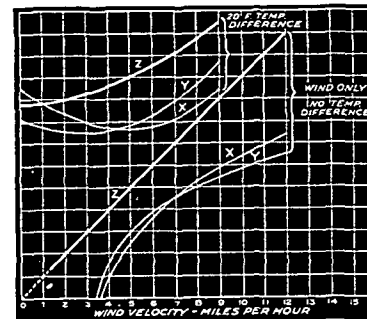
Efficiency: In a recent (January, 1923) test conducted by a disinterested party, more than 50 makes of ventilators were tested over a wide range of wind velocities and temperature differences with the result that the American-Larson Ventilator was shown to have the highest rating.

Here are the reasons:

The American-Larson Ventilator offers less resistance to the passage of air than any other ventilator, be it of the stationary or of the rotary type. The patented ejector tube effects air movement in direct ratio to wind velocities and temperature differences. Most ventilators do not function at all in wind only (no temperature difference) velocities below 3 1/2 miles per hour; furthermore, under temperature differences as great as 20 deg. Fahr., the efficiency of these ventilators actually decreases in gentle breeze up to 4 or 5 miles per hour velocity.



Further proof of the efficiency of American-Larson Ventilators is furnished by a comparative test conducted by Professor Trinks of the Carnegie Institute of Technology at Pittsburgh, in 1921. The results are shown below:



X = 18" Stationary Siphon Ventilator.
 Y = 18" Rotary Siphon Ventilator.
 Z = 16" American-Larson Suction Ventilator.

The official report of the Institute says, in part: "The comparison shows that the American-Larson is far superior to both types at all wind velocities. At very low velocities of wind, it still ventilates while the other types do not move any air. Similarly, the American-Larson Ventilator utilizes wind to increase the effect of temperature differences, while in the other types a gentle breeze actually diminished the ventilating effect."

Number and Size of Ventilators Required

The air supply per person and per hour, or the number of reversals of air contents per hour may be taken from the following table:

Type of Room to be Ventilated	Number of Renewals of Air Contents per Hour
Workshops and barracks	2 to 3
Offices	4
Schools	5 to 8
Hospitals	5 to 8
Churches, theatres	5 to 8
Dining rooms	5 to 10
Kitchens	8 to 12
Toilet and bathrooms	8 to 12
Foundries	10 to 12
Pickling rooms	15 to 20
Tanneries, paint rooms	10 to 12
Restaurants	5 to 6

To obtain effective, uniform ventilation and avoid local drafts, ventilators should be placed not more than 30 ft. apart; 20 ft. is a good average. It is best to locate them at the ridge unless the building exceeds 40 ft. in width, when two rows of smaller ventilators may be used. Where the building is surrounded by higher buildings, it is desirable to extend ventilators above them by mounting on stacks.

Example Showing Method of Calculation— In a building 100 ft. long, 35 ft. wide and 28 ft. average height the air is to be renewed 5 times per hour. How many and what size ventilators are required?

With a spacing of ventilators 20 ft. apart and 10 ft. from the ends, in one row along the ridge, 5 ventilators are required.

$(100 \times 35 \times 28 \text{ ft.}) \times 5 \text{ changes hr.} = 98,000 \text{ cu. ft.}$
 5 ventilators

per hour to be exhausted by each ventilator. From the table of capacities of American-Larson ventilators under average wind and temperature conditions, the nearest size is 24-in. size.

Requirements: Five 24-in. ventilators. For specified conditions of height, temperature and wind, the capacity of the American-Larson ventilator is:

$$Q = A \left[\frac{36 H \sqrt{(t^1 - t^0)}}{6 + v} + 20 \times v \right]$$

where Q is cu. ft. of air exhausted per hour, through a ventilator having the throat area of A sq. in., mounted on a roof at a height of H ft. from the center of the ventilator outlet to the floor, and with a wind velocity of v miles per hour, and average temperatures t^1 inside, and t^0 outside the building. The above is based on sufficient area of openings in the sides of the building for inlet of fresh air.