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HV Series CONVEYOR

PNEUMATIC CONVEYING SYSTEMS

OVERVIEW

The HV Series is a high capacity, side inlet, vacuum loaded, semi-dense phase conveyor with a capacity to 50+ TPH. It is best suited for pellets or granular materials that are abrasive and low dusting.

Medium pressure blower air is used to venturi-vacuum load and pressure convey air at intermediate line velocities and higher material-to-air ratios for less abrasive wear and particle degradation.

The unit is capable of multiple applications, from bulk carrier, IBC and bulk bag unloading to in-plant transfer. With optional load cells, the HV Series can also weigh and batch with inventory control.

APPLICATIONS

- High capacity transfers
- Bulk carrier, IBC and bulk bag unloading/In-plant transfer
- Side inlet vacuum loading for restricted headroom

MATERIALS / CHARACTERISTICS

- Pellet or granular materials that are low dusting

CAPACITY

- Up to 50+ TPH

BENEFITS AND FEATURES

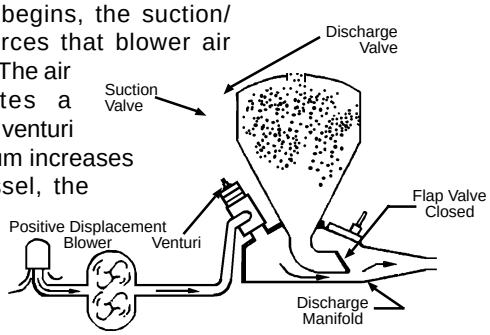
- Semi-dense conveyor uses medium pressure blower air to convey material at intermediate line velocities (<2000-3000 fpm) and material-to-air ratios (50-20) for low abrasive line wear and product degradation
- No costly pits required
- Less operator supervision via automated controls
- Specify:
  - Carbon steel, stainless steel or epoxy coated
  - Load cells
  - Portable or stationary
  - Multiple inlets
  - Butterfly outlet valve

REQUIREMENTS

- 110 VAC, 50-60 Hz, 12 VDC
- 15 PSIG convey air, 90-100 PSIG control air @ 3-5 SCFM

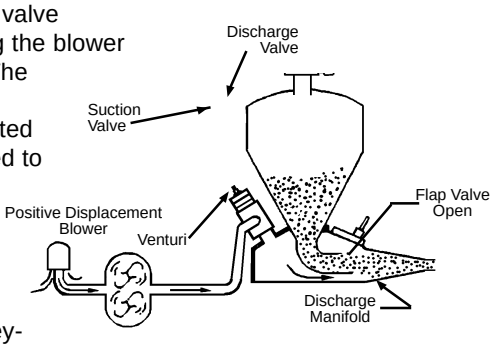
HV CONVEYOR

VACUUM LOAD CYCLE



As the load cycle begins, the suction/discharge valve forces that blower air through the venturi. The air pressure generates a vacuum by patented venturi action. As the vacuum increases in the transfer vessel, the inlet valve opens. Pulled by suction of up to 15 inches of mercury, the material flows from the source into the transfer vessel. The electronic level control regulates filling of the transfer vessel to optimum levels during the load cycle. However, a back-up solid-state timer takes over operation in the event material flow is interrupted.

PRESSURE DISCHARGE CYCLE



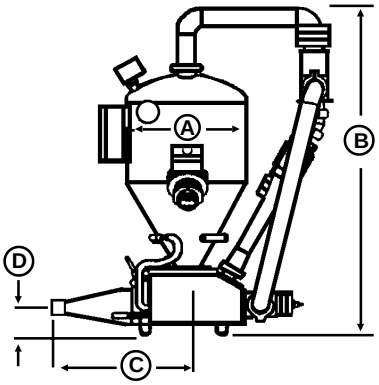
When the transfer has been filled to the optimum level, the suction/discharge valve switches, directing the blower air into the tank. The same positive air supply which created the vacuum is used to push the material into the discharge manifold where it is fluidized for semi-dense conveying—thus reducing line wear and increasing system efficiency.

PRODUCT SPECIFICATIONS

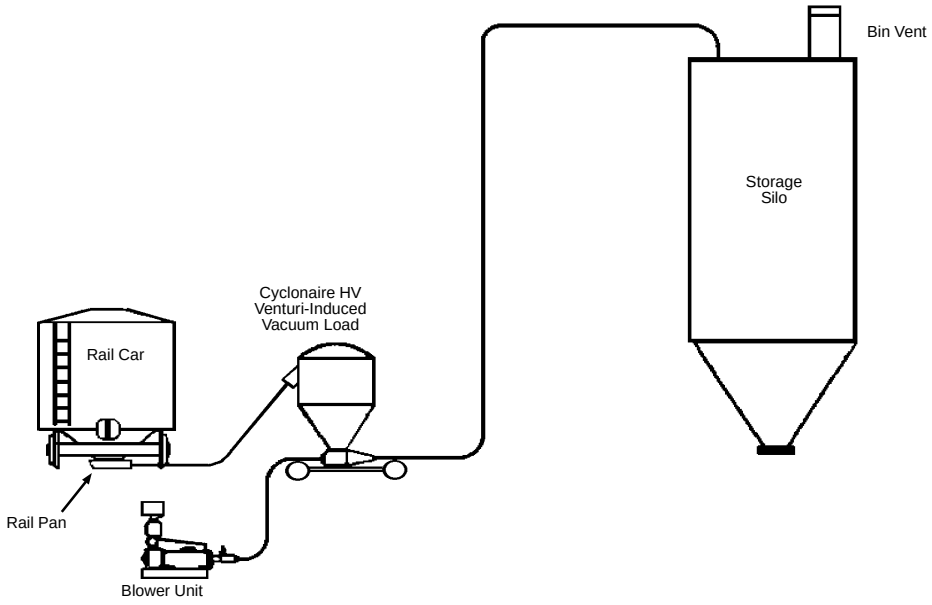
MODEL NUMBER	VOLUME CU.FT.	A	B	C	D	AIR INLET	MAT INLET	DISC	APPROX WT
HV-10	10	30	79	42	7	6	5	5	900
HV-20	20	30	79	42	7	6	5	5	950
HV-30	30	36	100	35	7	6	6	6	1150
HV-50	50	50	115	35	7	8	6	8	1400
HV-75	75	50	129	35	7	8	6	8	1550
HC-100	100	60	129	35	9	8	8	10	2500

NOTE: Dimensional data for reference only. Subject to change without notice. All weights are in pounds, all dimensional units are in inches, unless noted. Air inlet, material inlet, and discharge may vary per application. Series with connection type dimensions based on MNPT outlet.

Consult factory for larger tank sizes available



SEMI-DENSE PHASE TRANSFER



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