



## **HPD450/E490**

Dry Bulk Truck Blowers



*Experience Proven Results™*

## HPD450/E490

### Dry Bulk Truck Blowers

- Airflow to 325 cfm
- Pressure to 25 psig (HPD450)
- Pressure to 30 psig (E490 export only)
- 100% oil free air
- 12/18 months warranty

“Gardner Denver Drum can deliver the product at 2500 lbs. per minute, 25 psi., using only 0.9 gallons of fuel to unload 50,000 lbs. of cement in 20 minutes. This saves us the time and increases our bottom line. Thank you, Gardner Denver!”

— A satisfied user

Day to day, HPD450/E490 weight saving provided gives the operator a substantial benefit in terms of increased payload revenue, while its reliability and virtually maintenance free operation provides a peace of mind.



### Features

- Robust, economical, compact solution for high performance offloading of dry bulk materials
- Efficient sliding vane blower can be configured for mobile or stationary operation
- Provides completely oil-free air delivery for pneumatically conveying cement, lime, gypsum or other bulk materials
- Installation flexibility—double end shaft allows clockwise or counter-clockwise rotation
- Highest quality, nickel-chrome plated rotor and PTFE coated side plates for corrosion-free operation add to the durability
- Special carbon sliding vanes automatically adjust for wear providing continuous maximum performance
- Lower rotor speed and efficient design generate less heat allowing for a longer blower and discharge hose life
- Grease packed roller bearings require minimal maintenance and the Quick Strip Design™ allows for easy vane servicing in the field
- Includes a K1310 drive flange and mounting bolts capable of being driven directly, by PTO, belt or hydraulic drive
- Low noise operation, which allows for no ear protection during normal operation and an installation without the use of a muffler for reduced total weight

# Performance & Operation Principle

## HPD450/E490\* Performance Data – PTO Drive

PRESSURE	800 rpm		1000 rpm		1200		1400 rpm		1600 rpm	
PSI	CFM	HP	CFM	HP	CFM	HP	CFM	HP	CFM	HP
0	163	9	200	13	240	17	280	20	325	25
5	140	10	190	14	230	19	275	23	320	28
10	142	13	180	17	225	21	270	25	315	30
15	135	14	175	19	220	23	265	28	310	32
20	130	16	170	21	215	26	260	31	300	35
25	125	19	165	25	210	28	255	33	295	37
30**	125	21	175	27	213	30	255	35	295	41

Performances based on inlet air at standard temperature of 68°F, and ambient pressure of 14.7 psia and 36% relative humidity. Dimensions shown in inches.  
\*Export only. \*\*E490 only.

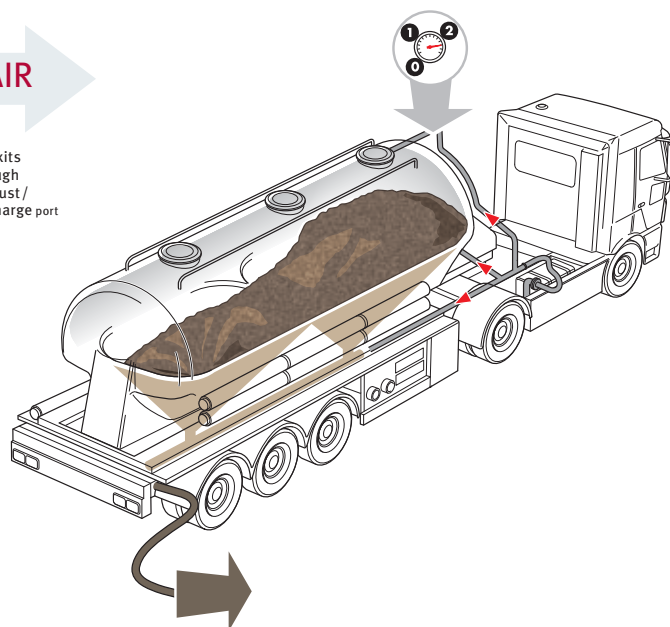
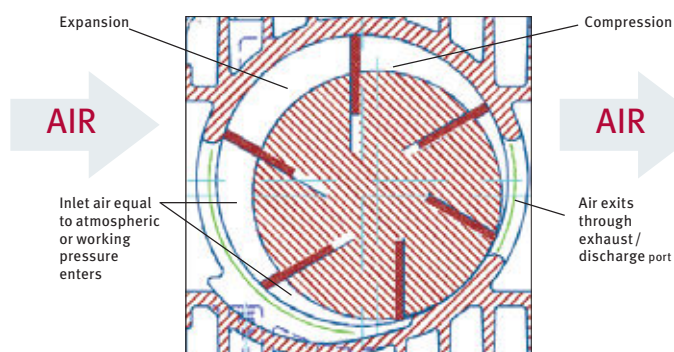
## Electric

1800 rpm	
CFM	HP
370	30
360	32
355	34
345	36
330	40
325	44

Pressure increase by volume reduction is the principle behind rotary vane operation.

- Rotor is positioned eccentrically in a cylindrical housing almost touching the cylinder, rotor blades, or vanes, are positioned inside rotor slots
- When rotor turns, blades are thrown out and slide against the cylinder internal surface, forming a cell between two blades with a volume that changes constantly during rotation

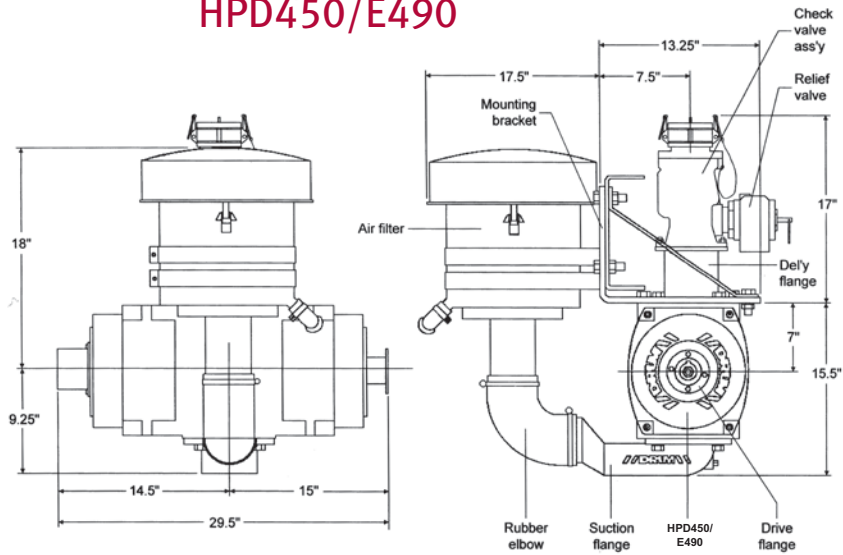
- Air enters from the inlet port into a cell until the rear blade reaches the far end of the inlet port and the cell has achieved its maximum volume
- The cell moves away from the port, while its volume is reduced and the pressure rises until the pressure in the cell exceeds the pressure in the pressure chamber
- The compressed air exits through the outlet port



Featuring time proven design and dependability, high performance and long life, Gardner Denver HPD450/E490 is a true leader in high performance offloading of dry bulk materials.



## Installation Dimensions HPD450/E490



### Lightweight Mounting Kit

- Universal mounting bracket for easy installation
- 2-stage air filter for extended filter life
- Lightweight aluminum discharge pipework
- Spring loaded check valve
- 2-stage aluminum relief valve
- Low profile aluminum suction elbow provides maximum ground clearance
- Bolt-on 3-inch camlock for easy maintenance
- Electric and Diesel driven packages available through Gardner Denver distributor networks

### The eco-friendly oil-free rotary vane blowers are used for a variety of applications, including:

- Pulverized limestone
- Clay
- Hydrated lime
- Barite
- Parlite
- Plastic pellets
- Dry bulk chemicals
- Calcium carbonate
- Cement
- Sand
- Fly ash
- Starch
- Sugar
- Grain
- Flour

**Gardner  
Denver**<sup>®</sup>

www.GardnerDenverProducts.com mobilesolutions@gardnerdenver.com

Gardner Denver, Inc. 1800 Gardner Expressway, Quincy, IL 62305  
Customer Service Department  
Telephone: (800) 682-9868 FAX: (217) 221-8780

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Member



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