



## DPG-B Series CONVEYOR



### OVERVIEW

The DPG-B Series is a gravity loaded, bottom discharge dense phase conveyor with a capacity rated to 100+ TPH. It is best suited for powdered, granular or pellet abrasive materials which are friable.

This unit provides the highest material-to-air ratios and the lowest line velocities resulting in smaller line sizes, lower air consumption, reduced dust collection and lower energy costs. Abrasive wear and particle degradation are also minimized with the DPG-B.

These factors translate to lower capital investment and lower operating costs.

Programmable logic controls (PLCs) offer reduced supervision for automated operation.

### APPLICATIONS

- Bulk unloading / In-plant transfer / Scaling / Batching
- Top gravity load / bottom discharge
- Optimum material-to-air ratios and lowest convey line velocities for maximum rate with gentle handling

### MATERIALS / CHARACTERISTICS

- Powdered, granular or pelletized materials

### CAPACITY

- 100+ TPH

### BENEFITS AND FEATURES

- Dense phase conveyor uses high pressure air to convey at extremely low line velocities (<400 fpm) and higher material-to-air ratios (135-140) for less abrasive line wear and less friable/fragile product degradation than with dilute phase conveying, yet optimizing rate.
- Top gravity load via single or dual stacked inlet valves. Bottom discharge for highest rates.
- Less operator supervision via automated controls
- Specify:
  - Carbon steel, stainless steel or epoxy coated
  - Dual stacked inlet valves
  - Load cells

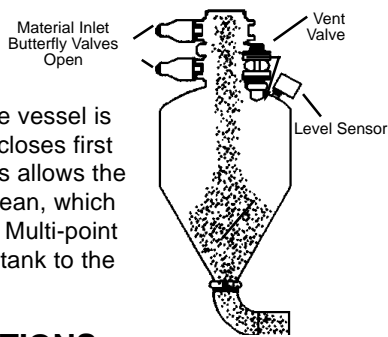
### REQUIREMENTS

- 110 VAC, 50-60 Hz
- 20-80 PSIG convey air: 80-100 PSIG control air @ 5-10 scfm

# DPG-B CONVEYOR

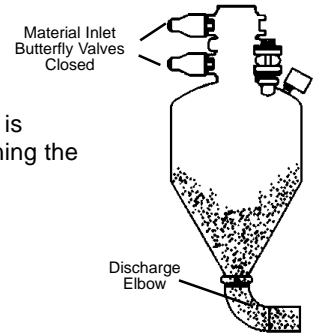
## LOAD CYCLE

The dual inlet valves open, allowing material to flow into the tank. The purge valve opens, venting displaced air down the convey line. When the vessel is filled, the top or material valve closes first to stop the flow of material. This allows the bottom or seal valve to close clean, which reduces wear on the the valve. Multi-point operation then pressurizes the tank to the discharge set point



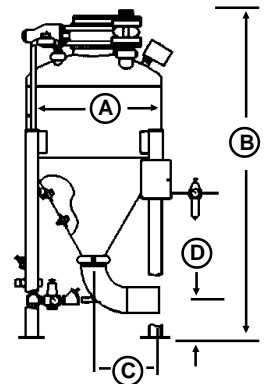
## DISCHARGE CYCLE

As the discharge cycle begins, the air supply valve opens. The air entering the tank pressurizes the vessel, forcing material into the convey line. When the vessel is empty, the air valve closes, returning the unit to the load cycle.



## PRODUCT SPECIFICATIONS

| MODEL NUMBER | VOLUME SQ.FT. | A  | B   | C  | D  | AIR INLET | MATERIAL INLET | DISCHARGE | APPROX. WEIGHT |
|--------------|---------------|----|-----|----|----|-----------|----------------|-----------|----------------|
| DPG-1B       | 5             | 18 | 42  | 11 | 6  | 1½        | 6              | 3         | 275            |
| DPG-3B       | 10            | 24 | 49  | 11 | 6  | 1½        | 6              | 3         | 350            |
| DPG-5B       | 25            | 24 | 59  | 13 | 8  | 1½        | 8              | 4         | 510            |
| DPG-10B      | 50            | 30 | 69  | 13 | 6  | 1½        | 8              | 4         | 600            |
| DPG-25B      | 75            | 36 | 101 | 17 | 10 | 2         | 10             | 6         | 1250           |
| DPG-50B      | 100           | 60 | 109 | 17 | 10 | 2         | 10             | 6         | 1950           |
| DPG-75B      | 150           | 60 | 129 | 21 | 11 | 2         | 12             | 8         | 2750           |
| DPG-100B     | 200           | 60 | 137 | 21 | 11 | 3         | 12             | 8         | 3300           |
| DPG-150B     | 150           | 72 | 154 | 25 | 13 | 3         | 14             | 10        | 5150           |
| DPG-200B     | 200           | 72 | 175 | 25 | 13 | 4         | 14             | 10        | 6975           |
| DPG-300B     | 300           | 84 | 195 | 29 | 14 | 6         | 16             | 12        | 8300           |
| DPG-400B     | 400           | 96 | 205 | 29 | 14 | 6         | 16             | 12        | 10000          |



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.

## DENSE PHASE TRANSFER

