

Rugged, Reliable, All-Purpose Conveying

Conair's DustBeater vacuum material loaders provide flexibility in meeting the varying demands of conveying pelletized and regrind materials to a hopper, bin or processing machine.

The DB8 is ideal for lower-volume conveying up to 200 lbs/hr {90.7 kg/hr}.

The DB12 provides a larger loader body, filter and vacuum motor for higher-volume conveying, up to 1000 lbs/hr {453.6 kg/hr}.



DB8
Direct Feed

DB12 Gravity
Discharge

The Original Vacuum Motor Loader

Conair's DustBeater, the original vacuum motor loader, remains the most reliable loader in the world. With its Easy Loading Control (ELC) and wide range of options, the DustBeater series meets your most demanding loading needs. Each model provides powerful conveying, is easy to set-up and simple to maintain. And an optional brushless motor (DB12 model) extends motor life indefinitely, with no brush maintenance.

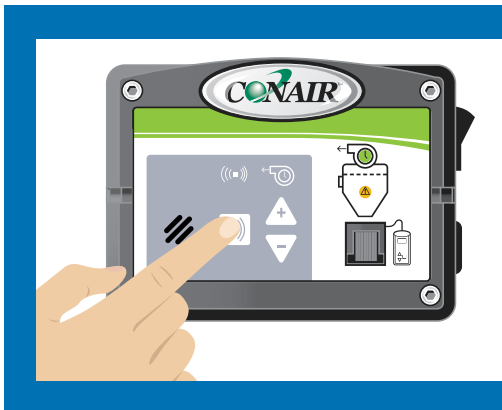
The optional ControlMate™ pendant allows you to load regrind along with virgin material, purge the conveying line, adjust blow back pulses and load and hold. Built-in security levels allow easy parameter viewing of simple day-to-day settings, yet secure the critical settings.

A choice of loader configuration allows direct loading to machine throats or hopper loading to bins and hoppers.

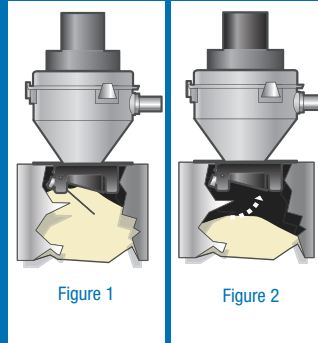
- ▶ **Convey up to 1000 lbs/hr**
A DB12 equipped with the optional 1.3 Hp brushless vacuum motor will convey up to 1,000 lbs/hr {453.6 kg/hr}.
- ▶ **Durable, powder-coated steel construction**
Each loader comes standard in carbon steel and is available in optional stainless steel.
- ▶ **Choice of discharges**
Select gravity discharge for hopper loading or direct feed to deliver materials straight to the machine throat.
- ▶ **Easy maintenance**
Plug-in connections, tool-less entry and drop-in filter make workhorse loaders easy to maintain.
- ▶ **Simple, intuitive control**
The included Easy Loading Control (ELC) provides reliable control of all common loading functions. The optional ControlMate™ pendant provides remote control and opens up advanced loading features like line purging, ratio loading, and much, much more.



How it Works



Loading control
Each on-demand loading sequence is clearly exhibited on the graphical control face with bright, simple LED lights. A "no-load" alarm light and buzzer are included.



The discharge flapper, when held open by material, prevents loading (Figure 1). When the material level drops and the flapper swings shut (Figure 2) the loader's demand switch tells the loader control to turn on the vacuum motor and start loading resin. The material is drawn into the loader body until the loading timer stops the motor. Loading stops and resin is dumped from the loader while the blowback bursts clean the filter.

ControlMate™ Pendant (optional)



ControlMate™ Pendant
The ControlMate pendant expands your loader's capabilities while providing convenient remote controls for your Access Loader. The ControlMate includes a 15 foot connection cable and handy holster.

A helpful graphic and array of LEDs, illustrate expanded loading functions like ratio loading and line purging while a three-digit numeric display shows each functions setting as it is selected.

- **Interchangeable programming**

One pendant can be moved from one ELC control to another to program advanced settings. The same ControlMate pendant can even be used with Conair's ELC-16 central vacuum controls.

Note: ControlMate pendants hold no program data, so one pendant can be freely used with the entire family of Conair ELC controls. Data, once programmed with the ControlMate, safely resides in each ELC control.

- **Change up to 16 parameters**

The additional loading functions available with the ControlMate Pendant include:

- | | | |
|--------------------|-----------------------|--|
| • On/Off | • Load time | • Fill sensor present |
| • Unload time | • Blowback | • Load and hold |
| • Load attempts | • Priority demand | • Purge / Adjustable Purge Valve (APV) |
| • Ratio layers | • Fill sensor logic | • Ratio installed |
| • Ratio percentage | • Demand sensor logic | • Blowback installed |
| • Purge time | | |

Note: Some ControlMate functions require additional components for their operation, i.e.: Ratio Valve, Purge Valve.

Configurations

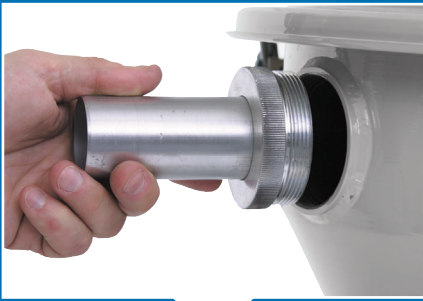


Direct feed
Mount directly to a machine throat with a Direct Feed Glass Hopper, available in three sizes. Quick-disconnect clamps allow easy loader removal for thorough cleaning. A drop-in grate magnet may be included in the cast aluminum base for catching tramp metal.



Discharge valve
The gravity discharge valve uses a non-contact, magnetic reed switch to signal loader demand. Stand-offs provide a rugged guard to prevent discharge damage. The huge opening eliminates material bridging. An optional, air-operated "positive discharge" valve is also available.

Features



Tubing connections

DustBeaters are built for a lifetime of service, so common wear components are designed for easy replacement. Tubing stubs are threaded and may be easily replaced in the event of damage, extreme wear or even for changing line sizes.



Easy Loading Control (ELC)

The simple, graphical control illuminates critical loading functions as they occur and includes a no-load light and horn.



Easy filter clean/exchange

The lid may be easily removed from the loader with no tools. The reinforced dacron disc filter simply drops into place. All connections are quick-disconnect for fast maintenance and easy service.

Options

Brushless motor

No maintenance. Longer life. Higher throughput. Brushless motors transform incoming power into fast acting magnetic pulses to create faster motor speeds and greater conveying power than traditional brush motors. Provides near-frictionless motor operation and long, maintenance-free loading performance.

Ratio valve

Dual inlet material valve allows the loading of regrind alternately with virgin and may be installed on the inlet stub or remotely. Requires optional Controlmate pendant for setting V/R loading times. *(Refer to the Ratio Valve specification sheet for more information.)*



Volume fill sensor

Provides efficient, automatic shut-off of the vacuum motor when the loader is full. An alarm light signals if the fill sensor has not been reached during loading.

Wear plates

T-1 tool steel plates, installed inside the loader body, radically reduce hopper wear when conveying highly abrasive materials like glass-filled compounds. Wear plates may be easily replaced, if needed.

Magnets

An airtight, drawer magnet may be added below any direct feed DustBeater to trap ferrous metal. Or, a low cost grate magnet may be inserted directly into the glass hopper of the direct feed receiver to save head room.

Stainless steel material contact

Provides stainless steel in place of carbon steel. The 304 grade stainless steel is uncoated internally (in material contact areas), but powder coated externally for optimum cosmetic appearance.

Remote demand sensor

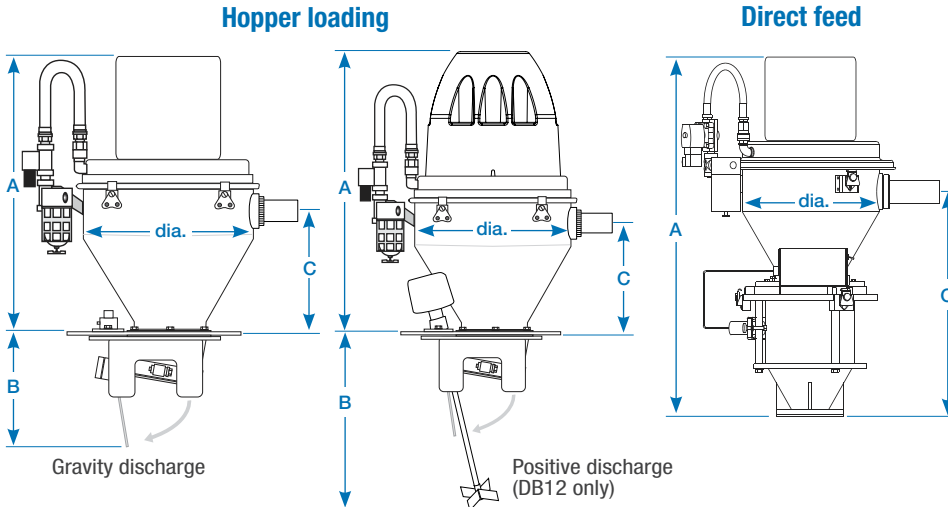
Move the fill level of the vessel being loaded to an alternate level to meet process needs. The remote demand sensor is useful on machine hoppers direct feed hoppers, drying hoppers and bins. May also be used on granulators, to start off-loading when regrind is present. Extension cables are available.

Positive discharge valve

Provides a pneumatically driven discharge valve on the bottom of the loader in the event that gravity will not sufficiently open the standard flapper after loading. Useful for very light materials or when high CFM drying hoppers are being loaded. (DB12 only).



Specifications



Brushless motor
High performance brushless motors plug directly into a 120 volt, 20 amp receptacle.

The motor provides power to the loader control, as shown.
Loaders with brush motors operate through the control.

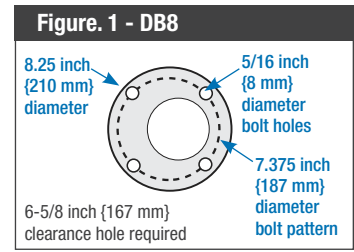
DB Series Self-contained Vacuum Loaders			
Model	DB8	DB12	DB12
Performance characteristics			
Vacuum motor	5/8 Hp-2 brush	7/8 Hp-4 brush	1.3 Hp brushless
Maximum injection mold machine size	500 tons	1000 tons	2000 tons
Maximum extruder size inches {mm}	2 {50.8}	3 {76.2}	4 {101.6}
Recommended throughput* lbs/hr {kg/hr}	200 {91}	500 {227}	1000 {454}
Maximum conveying distance ft {m}	50 {15.24}	75 {22.86}	120 {36.58}
Loader maximum temperature rating °F {°C}	180 {82}	180 {82}	150 {66}
Loader diameter inches {mm}	8 {203}	12 {304}	
Loader volume ft ³ {liters}	0.14 {4.0}	0.5 {14.2}	
Material/Vacuum line size † inches {mm} OD	1.5, 1.75, 2.0 {38.1, 44.4, 50.8} available for all sizes		
Available voltages, 50/60 Hz	120/220 VAC	120/220 VAC	120 VAC
Amps @ 120 VAC	8	14	17
Amps @ 220 VAC	4	7	N/A
Compressed air requirements	80 psi {5.52 bar}, 2 ft ³ /min {0.057 m ³ /min}, NPT fitting: 3/8 inch		
Filter area inch ² {cm ² }	50 {322.6}	113 {729}	
Filter type	Reinforced polyester disc		

Specification Notes

- * Throughputs beyond the recommended ratings should not be attempted unless you are conveying virgin material from close distances. Higher throughputs could result in shortened brush and/or filter life. For higher throughputs, consult Conair for a quote on central vacuum loaders.
- † 1.5 inch {38.1 mm} material line size not available with brushless motor.
- ‡ Add 3 inches {76.2 mm} to height if using sound shield option.
- § At 35 lbs. per ft³. {15.88 kg}

All DustBeaters are shipped with 15 ft {4.572 m} of flex hose and a vertical feed tube.
Specifications may change without notice. Consult with a Conair representative for the most current information.

Hopper Loading Configuration		
Model	DB8	DB12
Dimensions inches {mm}		
A - Height above mounting plate †	16 {406}	24 {610}
B - Depth below mounting plate with positive discharge	5.5 {140}	9 {229}
C - Height to center of material inlet	6.2 {157.5}	9.5 {241}
Mounting details	See Figure 1	See Figure 2
Approximate weight lb {kg}		
Installed	27 {12}	49 {22}
Shipping	50 {23}	65 {29}



Direct Feed Configuration						
Model	DB8			DB12		
Viewing Chamber Model	4 lb	15 lb	25 lb	4 lb	15 lb	25 lb
Viewing chamber capacity lb {kg} §	4 {1.81}	15 {6.8}	25 {11.3}	4 {1.81}	15 {6.8}	25 {11.3}
With isolator valve †	3 {1.36}	11 {4.99}	21 {9.53}	3 {1.36}	11 {4.99}	21 {9.53}
Dimensions inches {mm}						
A - Height above mounting plate	27.8 {706}	33.3 {846}	83.8 {2129}	35.8 {910}	41.3 {1049}	91.8 {2332}
C - Height to center of material inlet	18 {457}	23.5 {597}	74 {1880}	21.3 {541}	26.8 {681}	77.3 {1963}
Add for isolator valve	0	0	0	2.25 {57}	2.25 {57}	2.25 {57}
Mounting details	See Figure 3					
Approximate weight lb {kg}						
Installed	52 {24}	54 {25}	85 {39}	74 {33}	76 {34}	107 {48}
Shipping	80 {36}	84 {38}	117 {53}	108 {49}	110 {50}	145 {66}

