DYNAMIC AIR®
Conveying Systems

Vibra-Jet™
Bin Discharger
Series 256

Continuous material flowability

The innovative design of the Vibra-Jet Bin Discharger assures continuous flow of bulk granular materials finer than 50 mesh. Using aeration, the Vibra-Jet Bin Discharger restores flowability to materials that are prone to packing during storage in bins, silos or surge hopper, and promotes free flow of materials which tend to bridge or hang up. The Vibra-Jet bin discharger provides positive aeration along the bin wall, lowering the coefficient of friction between the wall and the stored material, thus improving the material flow characteristics. Dry bulk materials flow smoothly and evenly with guaranteed results.

Vibra-Jet bin aerators

The bin discharger is fitted with patented Vibra-Jet bin aerators that employ a unique aeration technique. With each pulse of compressed air, the Vibra-Jet bin aerators release a controlled amount of air in a circular pattern along the bin wall, dislodging material and keeping it moving. In addition to cleaning material from bin walls, the air action vibrates the rubber boot on the bin aerator, keeping it clean and unclogged. When the Vibra-Jet bin aerator is turned off, material pressure and the resilience of the rubber boot force the boot against the bin wall, preventing material from entering the air supply lines.

Multiple zones provide pulsing variations

The Vibra-Jet bin discharger has multiple aeration zones. Instead of activating all bin aerators simultaneously, any section can be operated independently. The zones can be programmed to aerate in any pulsing sequence. A variety of pulsing sequences are possible. For example, one zone at a time (1-2-3-4) or opposite zones simultaneously (1 and 3, then 2 and 4). The variable pulsing sequence maximizes utilization of available kinetic energy. The result is more effective discharge of materials in shorter discharge times and low air consumption.

Low profile design

The low profile design of the Vibra-Jet bin discharger saves valuable headroom space without intruding on silo capacity.

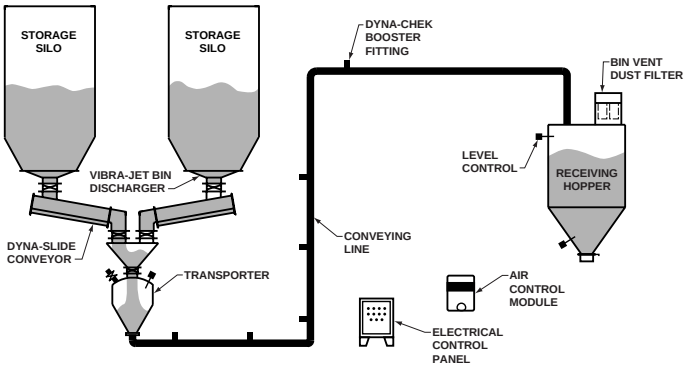
Features

- Independent volume control
- Multiple aeration zones
- Low profile saves headroom
- Unit is pre-piped
- No mechanical moving parts
- Easy and inexpensive to maintain
- Unaffected by moist or dirty air
- Self-cleaning anti-clog design
- Variety of pulsing sequences

Options

- Manual slide gate
- Stainless steel construction
- Food grade construction

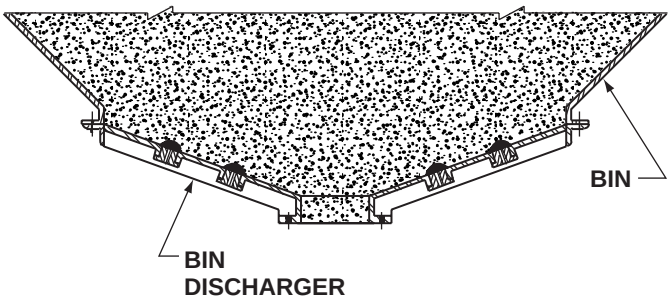
Typical application

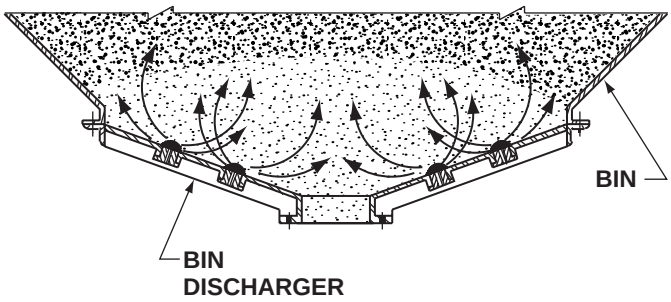


The Vibra-Jet bin discharger will handle

- Alumina
- Ball clay
- Barite
- Bauxite
- Bentonite
- Borax
- Calcium carbonate
- Cement
- Feldspar
- Fine coal
- Flour
- Fluorspar
- Fly ash
- Gypsum
- Iron oxide
- Kaolin clay
- Lime
- Milk powder
- PVC resin
- Quartz
- Salt
- Silica flour
- Silica sand
- Soda ash
- Sodium sulfate
- Sugar
- Talc
- And More

How the Vibra-Jet bin discharger works



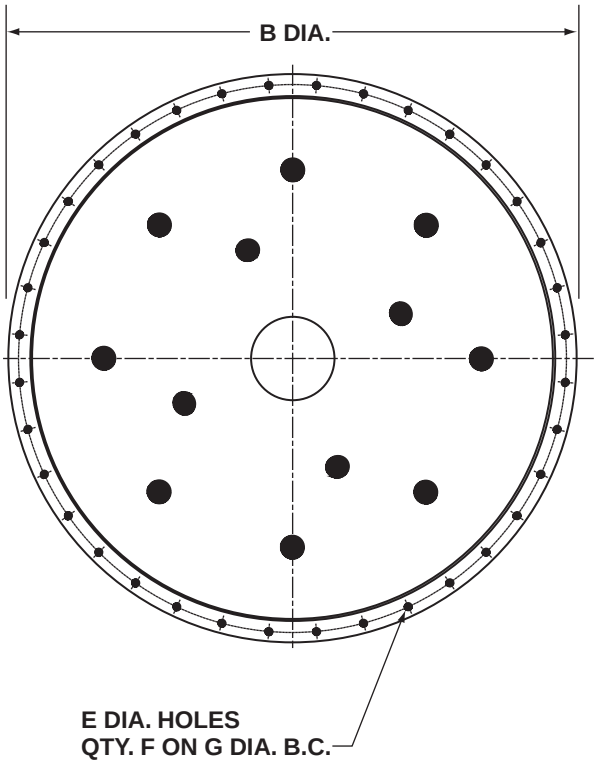


One supply line feeds compressed air into the manifold. The manifold is equipped with multiple solenoid valves, one for each aeration zone. Air is pulsed to the aeration zones according to a predetermined pulsing sequence. In each activated zone, the Vibra-Jet bin aerators discharge in a circular pattern along the bin wall, undercutting the material. This action reduces the friction between the wall and the stored material, enhancing material flow.

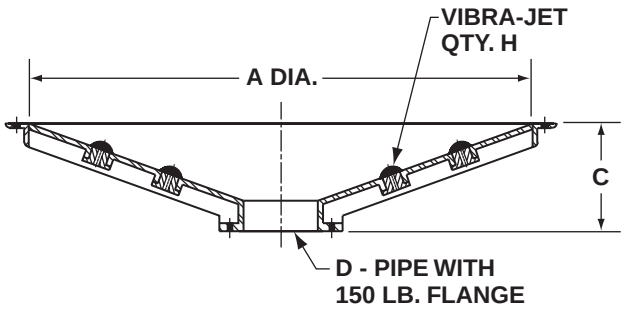
As the air movement continues, it fluidizes the material, inducing material flow until the discharge cycle is completed.

For the most effective discharge of material, pulsing air is recommended over continuous air flow. Air should be introduced only when the discharge gate is open.

Dimensions and specifications



TOP VIEW



SIDE VIEW

A DIA.*	B DIA.	C	D	E	F	G	H
36" 914 mm	42" 1067 mm	10" 254 mm	8" 203 mm	3/4" 19 mm	16	39-1/2" 1003 mm	4
48" 1219 mm	56" 1422 mm	12" 305 mm	10" 254 mm	3/4" 19 mm	24	51-1/2" 1308 mm	6
60" 1524 mm	66" 1676 mm	15" 381 mm	10" 254 mm	3/4" 19 mm	24	63-1/2" 1613 mm	8
72" 1829 mm	80" 2032 mm	17" 432 mm	12" 305 mm	7/8" 22 mm	32	77" 1956 mm	10
84" 2134 mm	92" 2337 mm	19" 483 mm	12" 305 mm	7/8" 22 mm	32	89" 2261 mm	12
96" 2438 mm	104" 2642 mm	21-1/2" 546 mm	12" 305 mm	1" 25 mm	48	102" 2591 mm	16
120" 3048 mm	130" 3302 mm	25" 635 mm	16" 406 mm	1" 25 mm	56	126" 3200 mm	18

** Sizes up to 20 feet and down to 12 inches are available upon request.*

Specifications subject to change without notice.

Dynamic Air Conveying Systems® and Vibra-Jet™ are trademarks of Dynamic Air Inc., St. Paul, MN, USA.

© 2001, Dynamic Air Inc.

Printed in U.S.A. • Bulletin 20106 (dm) (UK 3/08)

DYNAMIC AIR®
Conveying Systems

Corporate Headquarters
Dynamic Air Inc., 1125 Willow Lake Blvd., St. Paul, MN 55110-5193
Phone (651) 484-2900 • Fax (651) 484-7015

United Kingdom
Dynamic Air Ltd., 26 Peverel Drive, Granby, Milton Keynes, MK1 1QZ
Phone +44 (0)1908 622344 • Fax +44 (0)1908 646633

www.dynamicair.com