DYNAMIC AIT **Conveying Systems**

Restores flowability to bulk materials

The Vibra-Jet[®] bin aerator releases a controlled amount of compressed air in a circular pattern to promote gravity feed of bulk granular materials stored in bins, silos or surge hoppers. Induced aeration restores flowability to bulk materials that tend to pack during storage. It also promotes free flow of materials that tend to bridge or hang up.

Aerates along bin walls

Unlike other bin aerators, the Vibra-Jet bin aerator's air action fluidizes bulk material and gets it moving faster by aerating along bin walls. This provides a lower coefficient of friction between the wall and stored material and improves material flow. Air action not only keeps bin and hopper walls cleaner, but greatly reduces friction and greatly enhances mass flow of stored materials. Bulk materials such as bentonite, fly ash, flour, cement, feldspar, soda ash, clay, alumina or any powder finer than 20 mesh will gravity feed faster and more completely.

Features

- Aerates along bin walls
- Easily installed with optional mountings
- Optional materials of construction
- Abrasion resistant design
- Self-cleaning anti-clog design
- Vibrating action prevents build-up

Mounting Arrangement

Vibra-Jet bin aerators are installed near the discharge openings of silos, hopper or bins. Vibra-Jet bin aerators are placed in a circular pattern and in tiers so air will reach the discharge opening. More Vibra-Jet bin aerators may be required when handling materials that have a tendency to hang up or build up. The shape of the storage silo or bin is also a factor in determining the number of Vibra-Jet bin aerators required.

Vibra-Jet bin aerators should be installed no closer together than 12 inches center to center for most applications. Typically, units are installed so each air discharge pattern overlaps the ones on either side in a single row installation. In multi-tier installations, the overlap should extend upward as well. Upon request, Dynamic Air will assist you in designing a Vibra-Jet aeration system with optimum performance for your silo, bin or hopper.

FLEX HOSE VIBRA-JET BIN AFRATOR

Typical round tank mounting arrangement





Vibra-Jet® **Bin Aerator** Series 264

How the Vibra-Jet bin aerator works

High-pressure compressed air is introduced into the bin through the Vibra-Jet bin aerator in timed bursts to coincide with the start of the discharge process. The positive flow of compressed air dislodges the stored material and keeps it moving.

In addition to cleaning material from the bin walls, the rubber boot vibrates slightly to keep itself clean. Since the bursts of compressed air are generally less than 1/2 second, very little compressed air is required.



Dimensions and specifications

- Standard construction materials are carbon steel and black rubber for Model D Vibra-Jet bin aerators and aluminum for standard Model E and F Vibra-Jet bin aerators. Optional materials for sanitary, abrasive, corrosive or high temperature applications are available.
- 2. Specific air consumption, pressure and volume required will vary according to application.
- 3. Operating temperature: standard 150° F (66° C), optional high temperature 350° F (177° C).
- Shipping weight Model D 6 oz. (.20 kg); Shipping weight Model E or F - 2 lbs. (.90 kg).



MODEL D (for mildly abrasive materials) INTERNAL TANK MOUNTINGS

Specifications subject to change without notice.

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WELD TO BIN WALL AS SHOWN. 2" - 11-1/2 STRAIGHT PIPE BACK-UP WASHER THREAD SUPPLIED BY CUSTOMER RUBBER BOOT PLUG WASHER SHOULDER BOLT 3.00" 2.125" (76 mm) (54 mm) DIA. DIA 1/4" NPT PIPE THREAD CONNECTOR SEALING GASKET 1.00 (25 mm) 1.56" 1 69" (40 mm) (43 mm)

MODEL E (for abrasive materials) MODEL F (for highly abrasive materials) EXTERNAL TANK MOUNTINGS

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Air requirements

2" PIPE COUPLING CUT AND

Air pressure (PSIG)	20	40	60	80	100
Air volume (SCFM)	10	20	35	55	75

Due to the variable characteristics of material, this chart only represents approximate air consumption. Minimum operating pressure is 20 PSIG.