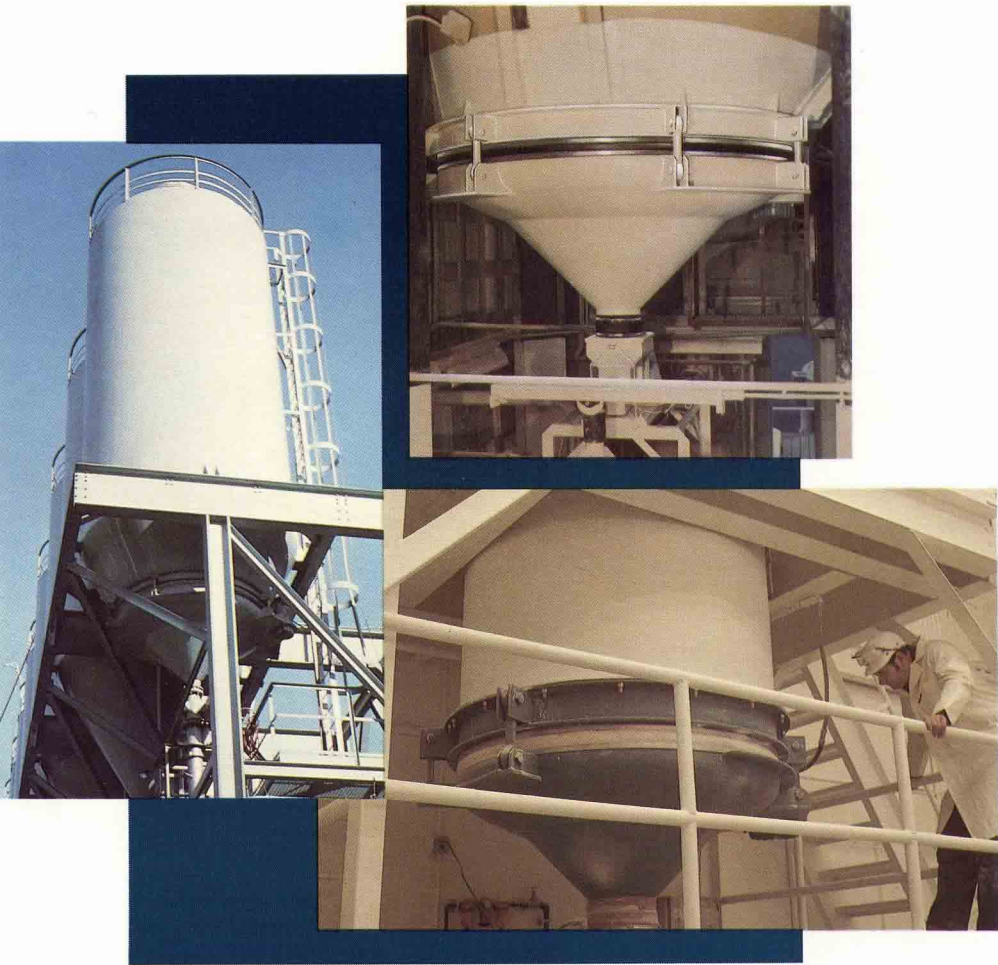


*Discharge Dry Materials from Storage*

# THE BIN ACTIVATOR



**Vibra Screw Inc.**

# THE BIN ACTIVATOR

*Invented  
and Perfected  
by Vibra Screw*

**T**oday's process industries most often rely on Bin Activators to move dry bulk materials out of storage, on demand. Properly applied, Bin Activators eliminate bridging and ratholing, reduce particle segregation and promote mass flow. They are efficient, convenient and economical and attach easily to any bin or silo whether new or existing.

Because we invented the Bin Activator almost 40 years ago, and continue extensive research into bin flow problems and solutions, Vibra Screw offers you an uncommon range of experience.

There are more Vibra Screw designed Bin Activators in service today, than all others combined, handling some of the most flow-resistant materials.

If you have a tough problem, we can show you how we've solved it.

***Exclusive features result in performance and reliability unequaled by any other bin discharge device.***

## ***Dished Head Contour***

Designed to meet ASME specifications, and with a wall thickness typically 50% greater than other dischargers of the same size, the dished head Vibra Screw Bin Activator is the strongest in the industry. Equally important, the combination of a dished head main body, exclusive convex baffle and performance-engineered lower cone

promotes uniform flow on-demand, without compaction. There is no need for cycling or secondary baffles.

The dished head design is energy efficient and often saves considerable headroom over other dischargers.

The strength and efficiency of the dished head Bin Activator contribute to long service life, even under extreme operating conditions.

## ***Forged Hanger Suspension System***

Each Vibra Screw Bin Activator is supported by a series of forged steel hangers, fitted with steel core elastomer vibration isolators.



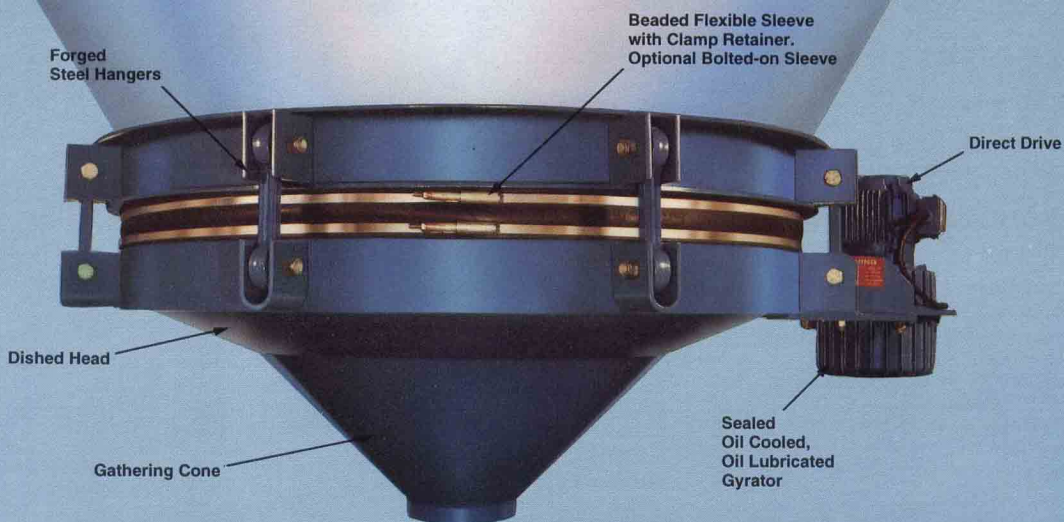
The result is enormous vertical strength along with near total isolation of Bin Activator vibration from the bin and surrounding structure. Cast or fabricated metal hangers with unpredictable performance characteristics under stress are not used on Vibra Screw Bin Activators.

## ***Part of a Complete Bulk Materials Handling System***

Very often, the Bin Activator is the prime mover in a complete storage, feeding or process system. Vibra Screw has the in-house capability to supply the system to meet your needs.

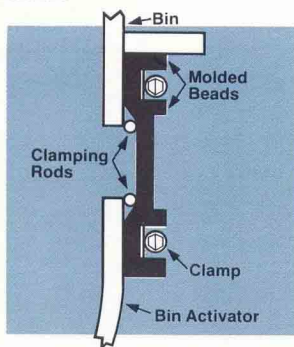
From tons to grams, volumetric or gravimetric feeding, batching or continuous, our experience and broad product range provide single source convenience and reliability.





### Patented Beaded Sleeve

Molded in one piece with four retaining beads, this Vibra Screw innovation has eliminated the problem of sleeve leakage and slippage. Stainless steel clamps fit securely between the beads and tighten easily and effectively.

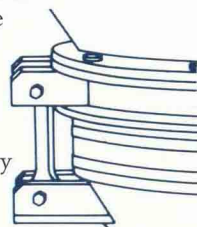


This sleeve design is so effective, it will withstand 10 psi internal pressure. It is the standard sleeve on all Vibra Screw Bin Activators.

Special compounds for high temperature, and a flanged, bolted sleeve for high pressure, are also available.

### Preassembled Mounting Ring

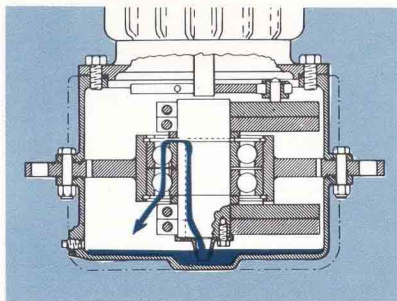
For trouble-free installation, we include a pre-assembled mounting ring as a standard feature on every Vibra Screw Bin Activator.



This means the Bin Activator is shipped completely assembled and ready to be bolted or welded to the bin.

### Oil-Lubricated Gyrator

Offered exclusively by Vibra Screw as a standard feature on large Bin Activators, our oil lubricated and cooled gyrator continues to set the industry standard. Oil lubrication results in quiet operation and long service life.



Thousands of Vibra Screw gyrators have been operating more than 25 years without service interruption.

The large force-generating eccentric weights are mounted on a massive shaft revolving in oversized, precision bearings. The drive motor is mounted in line with the eccentric weight assembly, but works through a floating coupling so that the motor bearings carry only the motor rotor. Motor life is several times that of a typical double shaft vibrator motor.

**The Vibra Screw Guarantee**  
No time limits. No conditions.

*If your Vibra Screw equipment doesn't perform in the service for which it was sold, we'll refund your money.*

Ask any other equipment manufacturer to put that in writing.

# ENGINEERING SPECIFICATIONS

## CONTACT MATERIALS

Carbon Steel.  
304 Stainless Steel.  
316 Stainless Steel.  
Abrasion-resistant steel.

## EXTERNAL SUPPORT BRACKETS

Carbon Steel.

## FLEXIBLE SLEEVES

### Standard:

Black Nordel or Neoprene 2-ply polyester,  
for temperatures to 325°F (163°C).

### Optional :

White Nordel or Neoprene, 2-ply polyester,  
for temperatures to 325°F (163°C).

Silicone, Nomex ply, for temperatures  
to 500°F (260°C).

Molded flanged sleeve for pressures to 14.9 psi.  
Standard sleeve for pressures to 10 psi.

## MOTORS:

### Standard:

230 or 460/3/60 totally enclosed, non-vented,  
supplied with 6 ft Neoprene-covered  
cable -- chemical type.

### Optional:

Explosion proof, Class I, Group D,  
Class II; Group F & G.

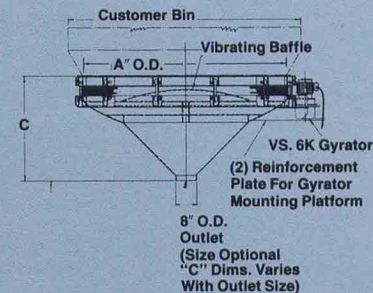
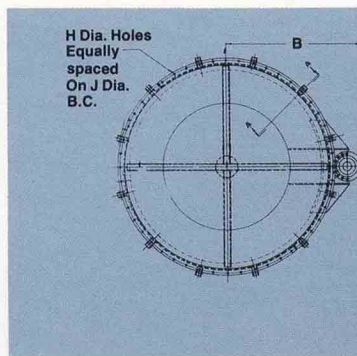
Severe Duty.

Special voltages on request.

Pneumatic, hydraulic.

## OUTLET SIZES:

Based on required flow rate or connections  
to down-stream equipment.



## COATINGS: (Internal & External)

Note: All surfaces are sandblasted in Vibra Screw's modern sandblasting department prior to coating.

### Standard External:

Machinery Blue enamel.

### Optional External:

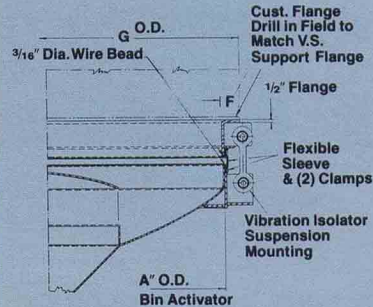
Epoxy Paints.  
Corrosion-resistant paints.  
Customer-specified special paints or colors.

### Standard Internal:

Stainless steel units, uncoated, carbon steel  
units, coated with rust preventive.

### Optional Internal:

Epoxy painted, food grade,  
one coat blue or white.  
Epoxy painted, three coats blue or white.  
Rubber/ceramic lining.



## OUTLET NOZZLES:

Bin Activators can be supplied with adjustable  
nozzles to feed a belt or vibrating pan conveyor.

SIZE	A	B	C	F		G	H	NO.	J	HP	(KW)	WGT
				*C.S.	**S.S.	C.S & S.S.	DIA.					
3'	36" (914mm)	29 <sup>5</sup> / <sub>16</sub> " (745mm)	25 <sup>1</sup> / <sub>2</sub> " (648mm)	3 <sup>1</sup> / <sub>4</sub> " (83mm)	3 <sup>1</sup> / <sub>4</sub> " (83mm)	42" (1067mm)	1 <sup>1</sup> / <sub>16</sub> " (17mm)	18	39" (991mm)	<sup>3</sup> / <sub>4</sub>	.55	615 lb (279kg)
4'	48" (1219mm)	37 <sup>3</sup> / <sub>16</sub> " (945mm)	30 <sup>1</sup> / <sub>4</sub> " (768mm)	3 <sup>1</sup> / <sub>4</sub> " (83mm)	3 <sup>1</sup> / <sub>4</sub> " (83mm)	54" (1372mm)	1 <sup>1</sup> / <sub>16</sub> " (17mm)	30	51" (1295mm)	1 <sup>1</sup> / <sub>4</sub> -1 <sup>1</sup> / <sub>2</sub>	1.0	760 lb (345kg)
5'	60" (1524mm)	43 <sup>9</sup> / <sub>16</sub> " (1097mm)	36 <sup>1</sup> / <sub>8</sub> " (918mm)	4" (102mm)	3 <sup>3</sup> / <sub>4</sub> " (95mm)	67" (1702mm)	1 <sup>1</sup> / <sub>16</sub> " (17mm)	30	63" (1600mm)	1 <sup>1</sup> / <sub>4</sub> -1 <sup>1</sup> / <sub>2</sub>	1.0	1010 lb (458kg)
6'	72" (1829mm)	51" (1295mm)	41 <sup>1</sup> / <sub>2</sub> " (1054mm)	4" (102mm)	3 <sup>3</sup> / <sub>4</sub> " (95mm)	79" (2007mm)	1 <sup>3</sup> / <sub>16</sub> " (21mm)	36	75" (1905mm)	2-4	1.89	1850 lb (839kg)
7'	84" (2134mm)	60" (1524mm)	46" (1168mm)	4" (102mm)	3 <sup>3</sup> / <sub>4</sub> " (95mm)	91" (2311mm)	1 <sup>3</sup> / <sub>16</sub> " (21mm)	36	87" (2210mm)	3	2.24	2340 lb (1061kg)
8'	96" (2438mm)	67" (1702mm)	52 <sup>1</sup> / <sub>4</sub> " (1327mm)	4" (102mm)	3 <sup>3</sup> / <sub>4</sub> " (95mm)	103" (2616mm)	1 <sup>1</sup> / <sub>8</sub> " (29mm)	40	99" (2515mm)	3	2.24	2810 lb (1274kg)
10'	120" (3048mm)	79" (2007mm)	62 <sup>3</sup> / <sub>4</sub> " (1594mm)	4" (102mm)	3 <sup>7</sup> / <sub>8</sub> " (98mm)	127" (3226mm)	1 <sup>1</sup> / <sub>8</sub> " (29mm)	48	123" (3124mm)	3	2.24	4900 lb (2222kg)
12'	144" (3658mm)	91" (2311mm)	72 <sup>1</sup> / <sub>2</sub> " (1842mm)	4" (102mm)	3 <sup>7</sup> / <sub>8</sub> " (98mm)	151" (3835mm)	1 <sup>1</sup> / <sub>8</sub> " (29mm)	48	147" (3734mm)	5	3.73	6740 lb (3057kg)
14'	168" (4267mm)	103" (2616mm)	89 <sup>1</sup> / <sub>2</sub> " (2273mm)	4" (102mm)	4" (102mm)	175" (4445mm)	1 <sup>1</sup> / <sub>8</sub> " (29mm)	72	171" (4343mm)	(2) 5	3.73	12,200 lb (5533kg)
15'	180" (4572mm)	109" (2769mm)	92" (2337mm)	4" (102mm)	4" (102mm)	187" (4750mm)	1 <sup>1</sup> / <sub>8</sub> " (29mm)	90	183" (4648mm)	(2) 5	3.73	14,000 lb (6349kg)
16'	192" (4877mm)	115" (2921mm)	97" (2464mm)	4" (102mm)	4" (102mm)	199" (5055mm)	1 <sup>1</sup> / <sub>8</sub> " (29mm)	96	195" (4953mm)	(2) 5	3.73	16,000 lb (7256kg)
18'	216" (5486mm)	127" (3226mm)	106 <sup>3</sup> / <sub>8</sub> " (2702mm)	4" (102mm)	4" (102mm)	223" (5664mm)	1 <sup>1</sup> / <sub>8</sub> " (29mm)	96	219" (5562mm)	(4) 5	3.73	24,000 lb (10886kg)

Above dimensions not to be used for construction.

\* Carbon Steel

\*\* Stainless Steel

For special size units, consult Vibra Screw.