



Specialist in the precision processing of dry materials

Vibra Screw Inc.

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VIBRA-BLENDER™

Continuous Blending of Dry Bulk Materials

The Accuracy and Consistency of Batch Blending, Continuously

Continuous blending systems are far more cost efficient than batch. Unfortunately, most can't match the accuracy and consistency of batch blending. Vibra Screw's patented Vibra-Blender does.

Fluidizing Dry Materials

Vibra-Blender utilizes a unique combination of a rotating paddle and material fluidization which, together, permit dry solids to blend with the ease of liquids. Gentle, controlled vibration of the mixing trough fluidizes material as it enters. There, a revolutionary mixing rotor with modified cut and fold flights provides agitation.

Fluidized material flows readily back through the cut openings in the flight insuring the required longitudinal mixing, while the flight folds induce through radial blending. The combination of vibrating material conditioning, controlled forward and backward flow, and radial mixing produces a thorough and uniform blend.

Materials flow through the Vibra-Blender by gravity, thereby assuring maximum blending action for any given throughput rate. Gravity flow also makes the blender self adjusting to changes in the flow rate requirements, eliminating the need for recalibration or slaving to other equipment.

Vibra-Blender's action is very gentle, resulting in an operation which is smooth, dust-free, and quiet with no material degradation.

Rugged Construction, Easy Maintenance

Vibra-Blender users can expect years of trouble-free operation. All external parts are fabricated of high-strength carbon steel. All drives are dust-tight. The patented gyrator is guaranteed to perform continuously for a minimum of 20,000 hours. For fast and thorough clean-up between jobs, the entire mixing section can be disassembled in a few minutes. Completely sanitary construction is also available.

Sizes to Suit

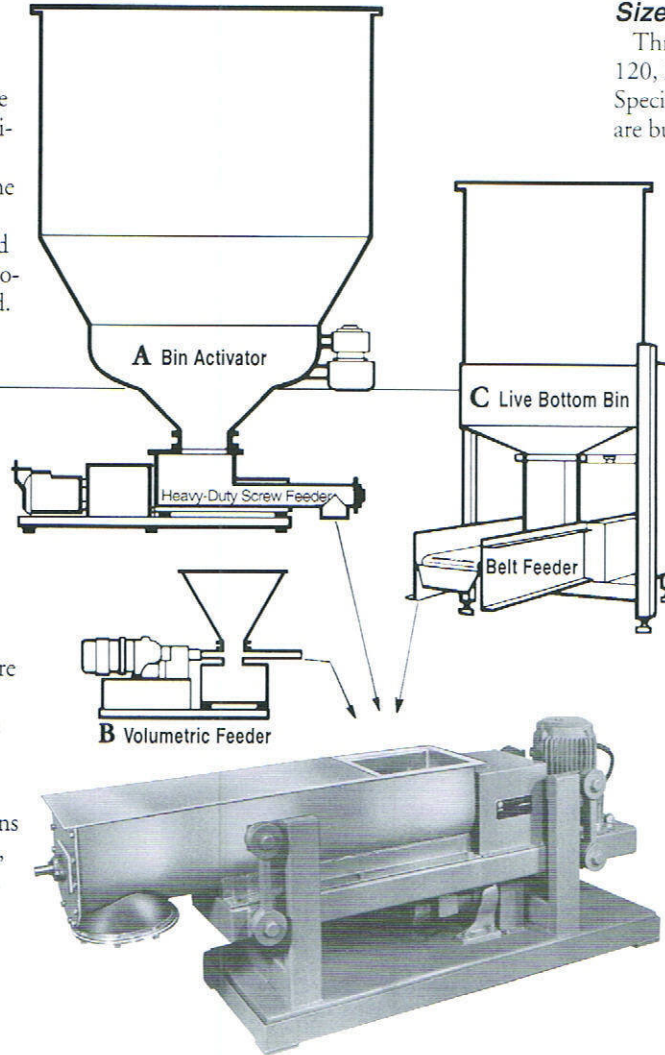
Three standard sizes provide capacities of 120, 325, and 1200 cubic feet per hour. Special sizes, including large tonnage units, are built to customer specifications. Vibra

Screw customers have the opportunity to select the blender which provides the most efficient match to their processing requirements.

The Vibra Screw Blending System

As with all continuous blenders, the Vibra-Blender discharges material in the same proportion as supplied at the inlet. Therefore, accuracy of the feeding equipment is critical. Vibra Screw manufactures various feeding components which are guaranteed to provide the required accuracy. Some of these components are illustrated here.

A: The patented Bin Activator attaches to new or existing storage bins and discharges materials in a positive, continuous flow. In the illustration, the Bin Activator discharges to a vibrating Heavy Duty Screw Feeder, which delivers material to the blender at rates up to 10,000 cubic feet per hour with accuracy of $\pm 1-2\%$.



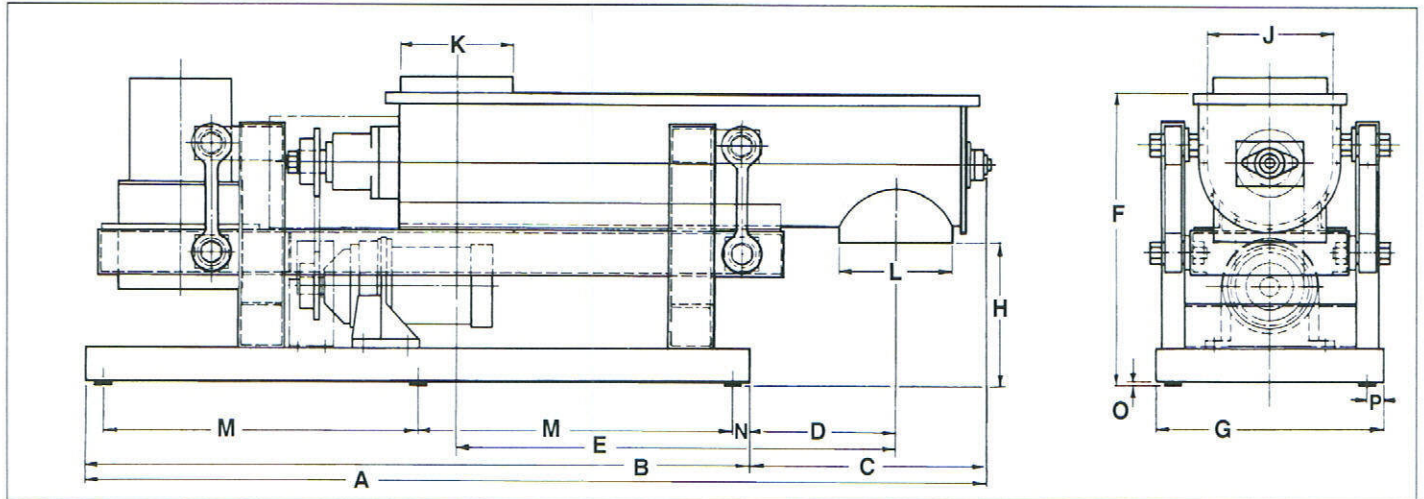
B: A Volumetric Feeder is often used in continuous blending systems to deliver additives to the mixture. Amounts can be as small as .037 cu ft/hr, with a maximum feed rate of 23 cubic feet per hour. At any given feed rate, the accuracy is also $\pm 1-2\%$.

C: The Live Bottom Bin, combining a static bin and Bin Activator, also insures positive discharge of material. The illustration shows it delivering material to a Belt Feeder, which is particularly good for handling waxy or pressure sensitive materials at rates up to 4,800 cubic feet per hour with guaranteed accuracy of $\pm 1-2\%$.

Bottom: The Vibra-Blender is the only industrial dry materials mixer which provides the economy and speed of continuous blending and the accuracy and consistency of batch blending.

VIBRA-BLENDER™

Specifications



Dimensions inches (mm)

Model	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	Gyrator	Drive	Capacity* cu ft/hr (cu m)
I	75 (1905)	55 (1397)	20 (508)	14 (356)	26 (660)	18 ¹ / ₄ (461)	12 ¹ / ₂ (318)	9 (229)	7 (178)	6 (152)	6 (152)	26 ¹ / ₄ (667)	1 ¹ / ₄ (32)	3/8 (10)	1 ¹ / ₂ (38)	1/2 HP	1/4 HP	To 120 (3.4)
II	80 ¹ / ₄ (2038)	59 (1499)	21 ¹ / ₄ (540)	13 (330)	39 (991)	27 (686)	20 (508)	13 ³ / ₄ (349)	11 (279)	10 (254)	10 (254)	28 (711)	1 ¹ / ₂ (38)	1/2 (13)	1 ¹ / ₂ (38)	1 HP	3/4 HP	To 325 (9.1)
III	126 ¹ / ₂ (3213)	88 (2235)	38 ¹ / ₂ (978)	24 ¹ / ₂ (622)	73 ¹ / ₂ (1867)	38 ¹ / ₂ (978)	30 ¹ / ₂ (775)	14 ³ / ₄ (375)	21 (533)	20 (508)	20 (508)	42 (1067)	2 (51)	2 (51)	1 ¹ / ₂ (38)	1 ¹ / ₂ HP	1 HP	To 1200 (33.6)

*Larger sizes available -- consult Vibra Screw. **NOTE: Cover must be in place during operation.**

CONTACT MATERIALS

- a. Carbon steel
- b. 304 stainless steel
- c. 316 stainless steel
- d. Special alloys

EXTERNAL MATERIALS, carbon steel

COATINGS

Standard external,
machinery enamel

Optional external,

- a. Epoxy paints
- b. Corrosion resistant paints
- c. Customer-specified special paints, colors

Standard internal

unpainted ("Rust-Ban" on carbon steel)

Optional internal

- a. Epoxy paints
- b. Teflon coatings (Dupont), as specified
- c. Polyurethane
- d. Customer specified

MOTORS

Standard

230 or 460/3/60 totally enclosed, non-vented

Optional

- a. Explosion proof,
Class I, Gp D, Class II, Gp E, F, G
- b. Chemical type, severe duty
- c. Special voltages on request

SANITARY APPLICATIONS

- a. All internal seams continuously welded
- b. All welds ground smooth
- c. All internal surfaces polished #4 finish
- d. Food grade gaskets and sleeves
- e. Blender cover held with quick-clamps

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.



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