

SIZING VIBRATORS FOR FLOW AID APPLICATIONS

Flow characteristics of different materials vary depending on moisture content, particle size and shape, and bulk density. Vibration can be applied in different frequencies and amplitudes to solve virtually any flow problem.

NAVCO® Pneumatic Piston Vibrators:

The primary consideration in selecting a vibrator is the wall thickness of the mounting surface. This selection can be made using the adjoining Table. Once this is done, the capacity of the live, or sloped section of the bin should be compared with the rated capacity of the vibrator as shown in the Table. If the rated vibrator capacity is less than the actual bin capacity, multiple vibrators or bin reinforcement should be considered.

SPECIFICATIONS:

<u>*Model and Piston Diameter</u>	<u>Hopper-Bin Thickness</u>	<u>Hopper-Bin Capacity (Live Section)</u>
BH 1"	1/16" — 1/8"	3 cu. ft.
BH 1-1/4"	1/16" — 1/8"	7 cu. ft.
BH 1-5/8"	3/16" — 1/4"	20 cu. ft.
BH 2"	3/16" — 1/4"	50 cu. ft.
BH 3"	1/4" — 3/8"	10 tons & over
BH 3L"	1/4" — 3/8"	20 tons & over
BH4"	3/8" — 1/2"	50 tons & over
BH 5"	3/8" — 1/2"	100 tons & over
BH 6"	3/8" — 1/2"	300 — 1000 tons
BH 8"	1/2" — 3/4"	800 — 1500 tons

*All models available in either "Impacting" or "Silent" Type

JOEST/NAVCO® Electromechanical Vibrators:

Wall thickness is not a factor in sizing Rotary Electromechanical Vibrators because bin reinforcement is always required (See Bulletin No. 4000.201). For proper sizing, the total force output for the vibrator(s) should be approximately 10 percent of the total mass in the live or sloped section of the bin. See Bulletin No. 4000.305 for centrifugal force output. Depending upon specified applications, multiple vibrators may be required.