

HOW TO SELECT PROPER VIBRATOR - IN THREE EASY STEPS -

A. FIND NEEDED VIBRATOR FORCE FOR YOUR APPLICATION. B. FIND AVAILABLE VIBRATOR MODELS.

FIND NEEDED VIBRATOR CENTRIFUGAL FORCE (IMPACT) FOR YOUR APPLICATION

1. BINS, HOPPERS.

A. To move the material in a bin or hopper, the friction between the material and bin skin has to be broken. Once this is done the material cannot cling to the bin sides and it will flow out through the discharge. The vibrator force needed to accomplish this, is for 80% of all applications, very simply calculated as follows:

Calculate the weight of the material in the transition or sloping part of the bin. Normally this is the only place where the friction between the material and the bin sides has to be broken.
- DO NOT CALCULATE THE TOTAL WEIGHT, ONLY WHAT IS IN THE TRANSITION PART.

For CONICAL BINS, calculate as follows: $261 \times \text{dia.}^2 \times \text{height} \times \text{material density in lbs/cu. ft.}$

For RECTANGULAR BINS, length x width, x height x 1/3 x material density.

B. When the weight has been calculated, divide by 10 - the figure you get is the force or impact needed on your vibrator. _____ lbs. See technical data under "force".

For example: The conical part of a 25 ton bin contains 7000 lbs. Divide 7000 by 10, you need a vibrator with 700 lbs. of centrifugal force or impact Find suitable vibrator on page 4 for VS-380 on page 6 BVS-440.

NOTE: Additional considerations when sizing vibrator to bins.

1. If bin side angle is below 30°, select next larger vibrator.
2. If bin thickness is extra heavy select next larger vibrator.
3. On real sticky and hard to move materials, it is better to use two (2) small vibrators instead of a large one (find the smaller one by figuring half the force needed).

2. FOR OTHER APPLICATIONS CONSULT THE FACTORY

COMPARISON AND REPLACEMENT CHART Turbine — Ball — Roller — Piston — Vibrators

VIBCO Quiet Turbines	dB*	Equivalent Size Ball Vibrators					Roller Vibrator		Piston Vibrator			
		Vibco	Martin	Cougar	Global	dB*	Martin	dB*	Houston	Navco	Cleveland	dB*
BBS-100	66	BB-100	BD-10	ABL-10	BS-10	75	BDR-10	87			SAEP 1/2	85
BBS-130	67	BB-130	BD-13	ABL-13	—	89	BDR-13	88		MP 5/8	SAEP 5/8	87
BBS-160	67	BB-160	BD-16	ABL-19	BS-16	79				MP 3/4	SAEP 3/4	88
BVS-60	66	BV-60	UCV-6			83					SAEP 1/2	85
BVS-130	67	BV-130	UCV-13		US-13	89				MP 5/8	SAEP 5/8	86
BVS-190	71	BV-190	UCV-19		US-19	93			BV-112	BH-1	VMS-1100	89
BVS-250	72	BV-250	UCV-25		US-25	85			BV-150	BH- 1 1/4	VMS-1125	90
BVS-320	70	BV-320	UCV-32			87	UCVR4-.5	91	BV-175	BH- 1 5/8	VMS-1150	91
BVS-380	74	BV-380	UCV-38		US-38	94			BV-225	BH-2	VMS-1200	93
BVS-440	76	BV-440	UCV-44		US-44	83						
BVS-510	77											
BVS-570	83						UCVR6-.5	91	BV-312	BH-3	VMS-1300	93
VS-100	66	V-100	CV-10	ABF-10		97	CVR-10	88			SAEP 1/2	85
VS-130	67	V-130		ABF-13						MP 5/8	SAEP 5/8	87
VS-190	70	V-190	CV-19	ABF-19	CS-19	93			BV-112	BH-1	VMS-1100	89
VS-250	70	V-250	CV-25	ABF-25	CS-25	92			BV-150	BH-1 1/4	VMS-1125	90
VS-320	69	V-320	CV-35	ABF-35	CS-35	88			BV-175	BH-1 5/8	VMS-1150	91
VS-380	72	V-380	DV-41	ABF-41	DS-41	98			BV-225	BH-2	VMS-1200	93
VS-510	77	—	DV-51	ABF-51	DS-51	98	—	—	BV-312	BH-3	VMS-1300	95

COMPARABLE ROLLER & HIGH FREQUENCY VIBRATORS

CCF-2000*	77	SVRLS-4000	CCR-2600	AA4-3300	—	98	UCVR-8-8	98	—	—	RA-40	98
CCL-5000*	78	SVRLS-4000	CCR-4400	—	GCD-4000	98	CCR-4400	98	—	—	RA-40	98
CCL-7000*	78	SVRLS-5500	CCR-5500	AG11-5000	GCL-5500	98	—	—	HFDR-5500	—	RA-56	98

* Also CCF, CCW or CCF Models