



# VIBRATION SOLUTIONS

ENHANCING THE FLOW OF MATERIAL

L3665



# VIBRATORS BUILT STRONGER TO SHAKE LONGER



## SOLUTIONS BY APPLICATION

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## WHY MARTIN?

With over 100 years of combined experience in applied vibration, we provide the highest quality products with the highest level of service at a fair price. Offering an extensive line of electric, pneumatic, and hydraulic vibrators, every product comes with our industry-leading and unsurpassed manufacturer's warranty and fast delivery times.

## APPLIED VIBRATION TECHNOLOGY

Using the power of applied vibration, Martin Engineering Vibration Technologies **energize material**, reducing friction against container walls as well as internal particle-to-particle cohesion. With properly sized and applied vibration, the **material moves** more freely, **feeds** more effectively, **sorts** more consistently, **compacts** more efficiently and **handles more easily**.

## APPLICATION

Each application is unique. No matter what industry your operation serves, Martin vibration has a product to suit your needs.

## AIR vs ELECTRIC POWER

### INITIAL COST

Initial purchase price for electric vibrators is typically greater than air vibrators.

### OPERATION COST

Electricity is less expensive than air, therefore long-term operating costs will typically be lower for electric vibrators.

### NOISE LEVEL

Electric vibrators are quieter than air vibrators; rotary is quieter than linear.

### POWER SOURCE AVAILABLE

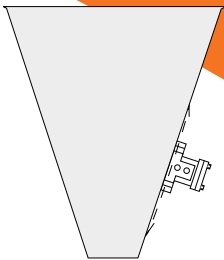
Availability of compressed air, electric, or hydraulic power may dictate choice.



## LINEAR vs ROTATIONAL FORCE

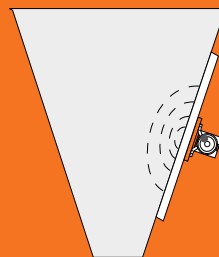


**LINEAR FORCE**  
for WET/STICKY  
MATERIAL



Linear vibrators activate the material inside a chute or bin by using heavy blows on the outside of the structure's steel walls.

**ROTATIONAL FORCE**  
for DRY MATERIAL



Rotary vibrators create a vibratory force through the rotation of an eccentric weight.

## NECESSARY MOTOR SPECIFICATIONS PER APPLICATION (ELECTRICS ONLY)

Application	Frequency (rpm)	Acceleration (G's)	Amplitude
Conveying or Feeding	900 - 1800	2.0 - 5.0	High
Screening	900 - 1800	5.0 - 7.0	High
Draining or Dewatering	900 - 1800	3.0 - 5.0	Medium
Bin/Hopper and Chute Evacuation	1800 - 3600	0.05 - 0.15*	Medium
Compaction of Bulk Materials	1800 - 7200	2.0 - 4.0	Low
Consolidation of Concrete	3600 - 10800	0.8 - 1.5	Very Low
Testing of Parts or Assemblies	450 - 7200	0.5 - 5.0	High to Low

\* Material Weight in Sloped Section

# **BIN, CHUTE, AND HOPPER VIBRATION**

Durable, energy-efficient vibrators that are ideal for numerous flow aid applications.

## **FOOT-MOUNTED ELECTRICS**

### **MARTIN® MM SERIES ELECTRIC VIBRATORS**



- Engineered for continuous-duty
- Fully-interchangeable drives with other major manufacturers

### **MARTIN® B3X SERIES ELECTRIC VIBRATORS**



- Class II explosion-proof
- Dual voltage



## **ROTARY PNEUMATIC**

### **VIBROLLER® ROLLER VIBRATORS**



- Low air consumption
- High frequency

### **VIBROLATOR® BALL VIBRATORS**



- Most cost-effective on the market
- Original ball vibrator

### **ATU SERIES TURBINE VIBRATORS**



- Energy efficient
- Quiet operation



## PNEUMATIC PISTON

### AP5 SERIES PISTON VIBRATORS



- Service-free with use of FRL
- Great for sticky, coarse, or high-moisture material

### THUMPER™ SERIES TIMED IMPACTOR



- Timer controlled
- Variable vibration from 1 to 60 impacts per minute

### PV SERIES PISTON VIBRATORS



- Stronger robust design
- Suitable for high temperature applications

### 2000 SERIES PISTON VIBRATORS



- Broad application range
- High-frequency, high-impact energy



# VIBRATORY EQUIPMENT

Durable, energy-efficient vibrators that are ideal for numerous applications such as feeders, conveyors, tables, and bin activators.

## MARTIN® SCREEN VIBRATORS



- Provides up to 16,500 lbf
- Direct replacement for Derrick® screen vibrators\*

## MARTIN® F-SERIES AND MFD-SERIES VIBRATOR



- Designed specifically for round separators
- Available in any rating

## MARTIN® HSV SERIES HYDRAULIC VIBRATOR



- Ideal for remote applications
- Used in screening applications

## MARTIN® MM SERIES ELECTRIC VIBRATORS



- Engineered for continuous-duty
- Fully-interchangeable drives with other major manufacturers

## MARTIN® MMX SERIES ELECTRIC VIBRATORS



- Class I explosion-proof
- Larger C4 fit bearings
- Higher force outputs

\*Derrick® is a registered trademark of Derrick Corporation, Buffalo, New York. There is no affiliation between Derrick Corporation and Martin Engineering.

# MOBILE TRUCK VIBRATION

Cougar® Truck Vibrators boost productivity by thoroughly and evenly unloading material. After patenting the world's first 12-volt truck vibrator in 1964, we continue to make the most rugged and reliable truck vibrators on the market.

## COUGAR® DC SERIES TRUCK VIBRATOR



**DC-3200/-2700/-  
2500/-1600/-1100**

- 1000-3200 force-lbs at 4000-5000 rpm
- Available in 12 and 24 volt

## COUGAR® MDC SERIES TRUCK VIBRATOR



**MDC12-400/700**

- Available in 400 or 700 pounds of force
- Available in 12 or 24 volt

## COUGAR® SDC SERIES TRUCK VIBRATOR



**SDC12-40/100/200**

- Up to 200 pounds of force
- Available in 12 volt

## THD TRUCK VIBRATOR



**THD-2500/1600**

- Ideal for dump trucks
- Good for self-powered heavy equipment





## TRUCK APPLICATION

Model	Dump Truck				Spreaders				Concrete Pumper	Sanitation, Pumper & Vacuum Trucks	Volumetric Mixers	Mixer Trucks	Grain Trailers	Fertilizer Tenders
	Standard			Tandem Live Bottom	Slide-In	Mount-ed	Tailgate or ATV							
	1-5 yards	5-10 yards	11+ yards	15-30 yards	5-10 yards	5-10 yards	.2-2 yards	2-4 yards						
DC 3200			X	X		X				X				
DC 2700		X				X				X				
DC 2500		X				X				X				
DC 1600	X				X	X								
DC 1100	X				X									
MDCV-700					X						X			X
MDC 400					X				X					
SDC 200								X	X					
SDC 100							X							
SDC 40							X							
THD-2500 (hydraulic)		X	X	X						X				
THD-1600	X													
AP5-200-Y (pneumatic)											X		X	
ATU-43												X		

### AP5 SERIES PISTON VIBRATORS



**AP5-200-Y**

- Never need service when used with filtered or lubricated air
- Great for sticky, coarse, or high-moisture material

### ATU SERIES TURBINE VIBRATORS



**ATU-62**

- Mounts easily with cradle lug brackets
- Low-noise for indoor application

# CONCRETE CONSOLIDATION

Martin® vibrators solve common problems in the precast concrete industry. With electric and pneumatic options, Martin vibrators will improve productivity and increase material strength and compaction.

## **MB36-3000** CONCRETE-FORM VIBRATOR



- CSA certified
- Fully interchangeable with Hawkeye\* and BRECON\*\* units

## **U1-1600** HIGH-FREQUENCY



- Includes overload and current protection
- Optional speed control

## **VIBROTOR™ CCR** VIBRATOR



- Long-lasting
- Easily mounted using brackets

\*There is no affiliation between HawkeyePedershaab and Martin Engineering.

\*\*There is no affiliation between BRECON Vibrationstechnik GmbH and Martin Engineering.



# RAILCAR VIBRATION

Railcar vibrators from Martin Engineering provide powerful vibration that enhances material flow for faster and safer unloading.

## 3-INCH IMPACTING RAILCAR VIBRATOR



- Includes a handle for easy placement and removal
- Lightweight at 49 pounds

## VIBROTOR™ CCR VIBRATOR



- Long-lasting
- Easily mounted using brackets

## BRUTE® CCV VIBRATOR




- Clamp foot for portability and positive mounting
- Adjustable eccentrics




#### GLOBAL LOCATIONS

 UNITED STATES

 AUSTRALIA

 BRAZIL

 CHINA


 FRANCE

 GERMANY

 INDIA

 INDONESIA

 ITALY


 MEXICO

 PERU

 RUSSIA

 SPAIN

 SOUTH AFRICA

 TURKEY

 UNITED KINGDOM

Authorized representatives in over 32 additional countries

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Part No. L3665-AU-10/21