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.

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.

SOLUTIONS BY APPLICATION

3  Vibration Basics
4-6  Bin, Chute, Hopper
7  Vibratory Equipment
8-9  Mobile Truck
10  Concrete
11  Railcar
**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**
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**
Rotary vibrators create a vibratory force through the rotation of an eccentric weight.

**NECESSARY MOTOR SPECIFICATIONS PER APPLICATION (ELECTRICS ONLY)**

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

* 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

visit martin-eng.com | call 855-394-4885 | email vibration@martin-eng.com
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
BINS, CHUTES, AND HOPPERS

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
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 lbsf
- 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

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*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**

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

**COUGAR® MDC SERIES TRUCK VIBRATOR**

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

**COUGAR® SDC SERIES TRUCK VIBRATOR**

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

**THD TRUCK VIBRATOR**

- Ideal for dump trucks
- Good for self-powered heavy equipment
# Mobile Truck<br>Model Dump Truck Spreaders<br>Concrete Pumper<br>Sanitation, Pumper & Vacuum Trucks<br>Volumetric Mixers<br>Mixer Trucks<br>Grain Trailers<br>Fertilizer Tenders

## Standard Tandem Live Bottom Slide-In Mounted Tailgate or ATV

<table>
<thead>
<tr>
<th>DC 3200 X X X X</th>
<th>DC 2700 X X X</th>
<th>DC 2500 X X</th>
<th>DC 1600 X</th>
<th>DC 1100 X</th>
<th>DC 700 X</th>
<th>DC 500 X</th>
<th>DC 350 X</th>
<th>DC 250 X</th>
<th>DC 200 X</th>
<th>DC 150 X</th>
<th>DC 100 X</th>
<th>DC 75 X</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5 yards</td>
<td>5-10 yards</td>
<td>11+ yards</td>
<td>15-30 yards</td>
<td>5-10 yards</td>
<td>2-2 yards</td>
<td>2-4 yards</td>
<td>2-4 yards</td>
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</table>

## Truck Application

### AP5 Series Piston Vibrators
- Never need service when used with filtered or lubricated air
- Great for sticky, coarse, or high-moisture material

### ATU Series Turbine Vibrators
- Mounts easily with cradle lug brackets
- Low-noise for indoor application

### DC Series Glow Plug
- 1-5 yards
- 5-10 yards
- 11+ yards
- 15-30 yards
- 5-10 yards
- 2-2 yards
- 2-4 yards
- 2-4 yards
- 2-4 yards
- 2-4 yards
- 2-4 yards
- 2-4 yards
- 2-4 yards

### Model DC 3200 X X X X
- DC 2700 X X X
- DC 2500 X X
- DC 1600 X
- DC 1100 X
- DC 700 X
- DC 500 X
- DC 350 X
- DC 250 X
- DC 200 X
- DC 150 X
- DC 100 X
- DC 75 X

### Spreadsers
- Tandem Slid-In
- Bottom Mount-or ATV

### Concrete Pumper
- Sanitation, Pumper & Vacuum Trucks
- Volumetric Mixers
- Mixer Trucks
- Grain Trailers
- Fertilizer Tenders
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 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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