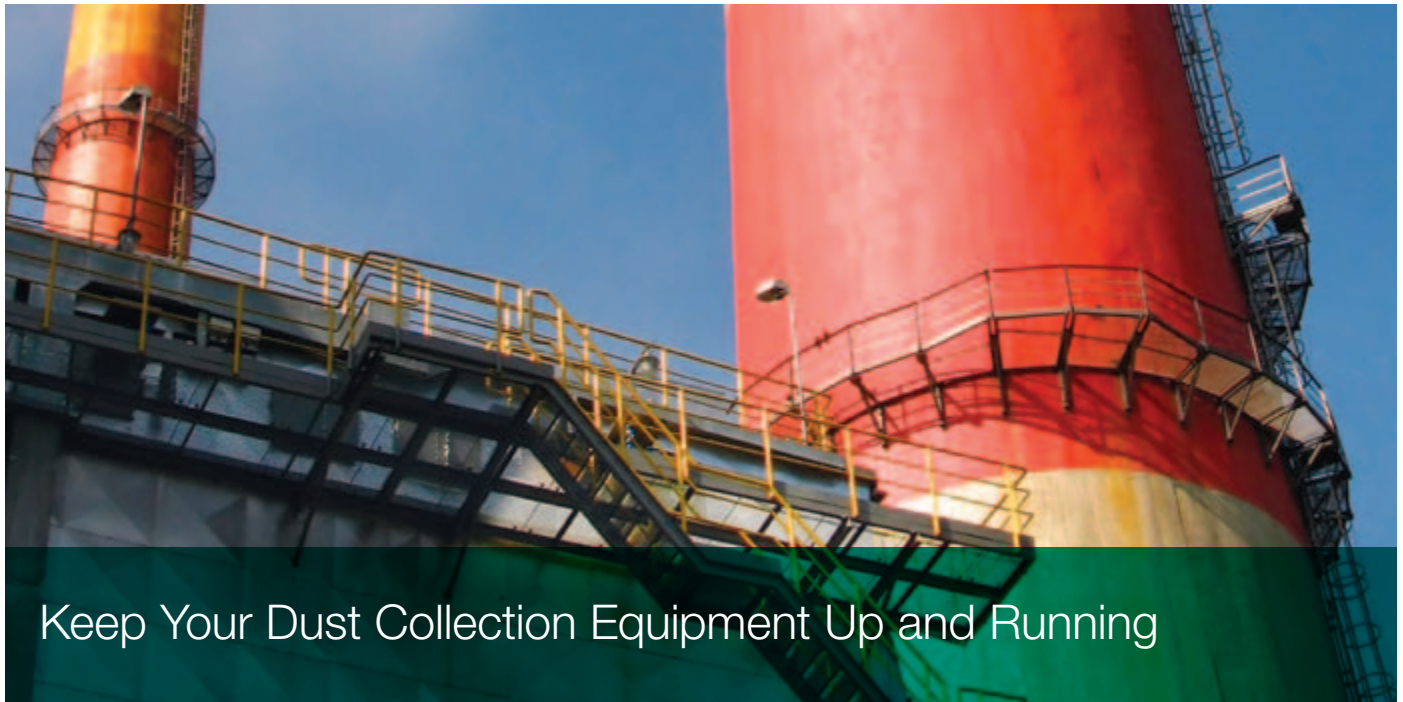


Pneumatic Vibrators, Rappers & Knockers for Dust Collection Equipment



Keep Your Dust Collection Equipment Up and Running

In manufacturing environments, poor treatment of dust and airborne particulates can clog machinery, slow down production processes, and cause significant health and safety hazards. That's why making sure your dust collection equipment is working properly is so important. At the Cleveland Vibrator Company, we offer vibrators, rappers and knockers that can extend the life of your equipment, keep it running at optimal efficiencies and improve clean out processes. These benefits all add up to a reduction in maintenance and materials for your equipment, higher production rates and less dust in your work environment. While offering products that are ideal for electrostatic precipitators, bag houses, cyclone collectors and collection hoppers, we can provide consultative services to help you select the right vibratory solution for your specific dust collection application.

BENEFITS INCLUDE

- No bearings or belts that wear out as on mechanical shakers
- Lower stress on filter bags and improved reverse air clean out
- Vibrators, rappers and knockers made of durable, one-piece, high-quality ductile iron housings for long life
- Hand-finished honing in the bore ensures optimal use of air and less wear
- All vibrator and knocker units include threaded exhaust port with port protector or muffler and Grade 5 mounting hardware
- All units can be mounted at any angle without the use of an internal spring (a common wear part of competitive units)
- Lubrication-free coated units available in all models

Vibra-Might VMS Air-Piston and Vibra-Might VMSAC Air-Cushioned Vibrators

Both our air-piston and air-cushioned vibrators provide linear force to allow for the controlled application of directional force on materials.

- Air-cushioned models produce less noise without sacrificing performance
- VMS/Impact models provide slightly more force where noise isn't a concern
- Durable, one-piece, high-quality ductile iron housing
- Dual diameter piston allows for mounting at any angle without use of internal springs
- Hand-finished honing in the bore ensures smooth, tight piston fit and a longer life
- NitroFusion-hardened pistons extend life and effectiveness
- All vibrator and knocker units include threaded exhaust port with port protector or muffler to prevent contamination and control noise
- Mounting fasteners included for quick setup
- Available as a kit that includes mounting channel, 5-foot inlet and exhaust hose with fittings, hand valve and lubrication control
- Portable mounting system available for easy transfer to multiple applications

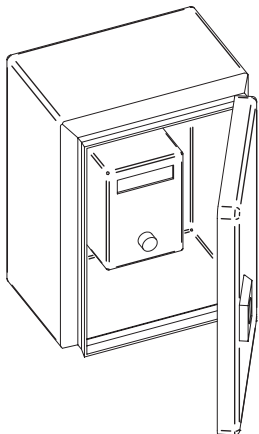


Single Impact Air Knockers

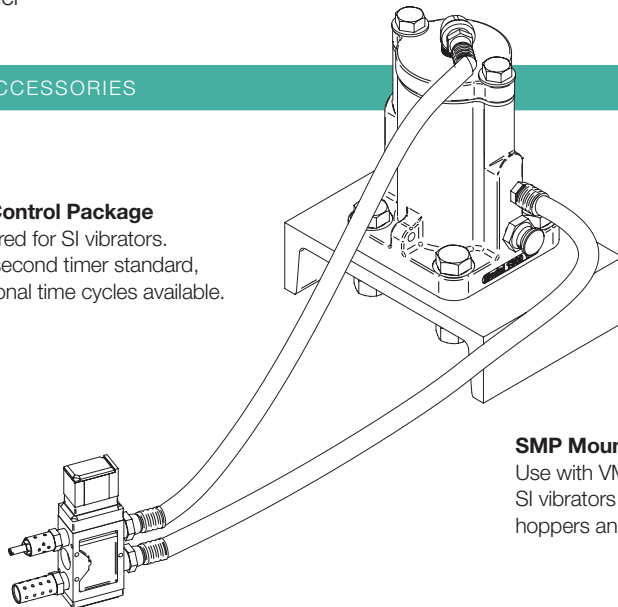
These are ideal for moving sticky materials that tend to clog hoppers under continuous vibration.

- Timer allows operation tuning of single impacts at a rate optimal for specific material and application, acting like hammer strikes without manual labor or damage to equipment
- Durable, one-piece, ductile iron housing and springless design ensure long, effective life
- Use of ported exhaust reduces noise levels, while pneumatic power allows for operation in hazardous areas
- Dual diameter piston allows for mounting at any angle on bins, chutes and hoppers
- Includes mounting fasteners and gasket for quick setup
- Kits include mounting channel, 5-foot inlet and exhaust hose with fittings and 5-port spool valve, and timer

MOUNTING AND CONTROL ACCESSORIES



SIC Control Package
Required for SI vibrators.
One-second timer standard,
additional time cycles available.

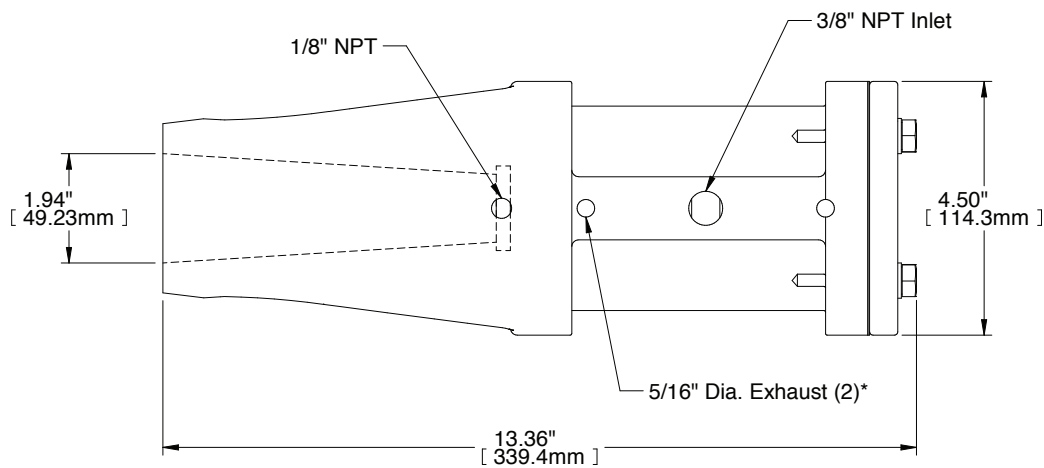


SMP Mounting Channel
Use with VMS/VMSAC or
SI vibrators for mounting
hoppers and cyclones.

PMA Electrostatic Precipitator Rappers

These products are specifically designed for dislodging dust collected in electrostatic precipitators.

- Durable, one-piece, high-quality ductile iron housing and springless design for long life
- Tapered mount design conforms to most shaft and adapter designs currently in use
- Piston and bore design produce higher frequency and force, using less air than competitive units

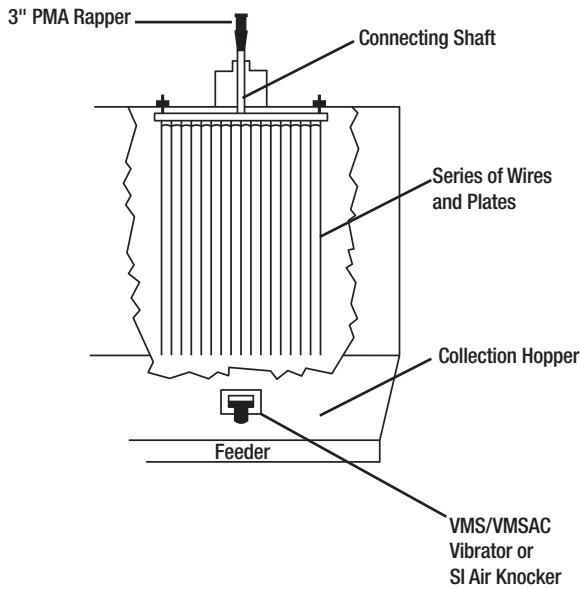


*3/8" NPT Exhaust ports available on corrosion resistant models.

MODEL	LENGTH	DIAMETER	PISTON DIAMETER	INLET PORT	OUTPUT PORTS	WEIGHT	FREQUENCY	AIR CONSUMPTION	NORMAL OPERATING PRESSURE
3" PMA	13" 33 cm	4½" 11.4 cm	3" 7.6 cm	⅜"	(2) ½" 1.2 cm	40 lbs 18 kg	3,000 VPM	8.3 SCFM 235 lpm	20 to 40 PSI 1.4 to 2.7 bar

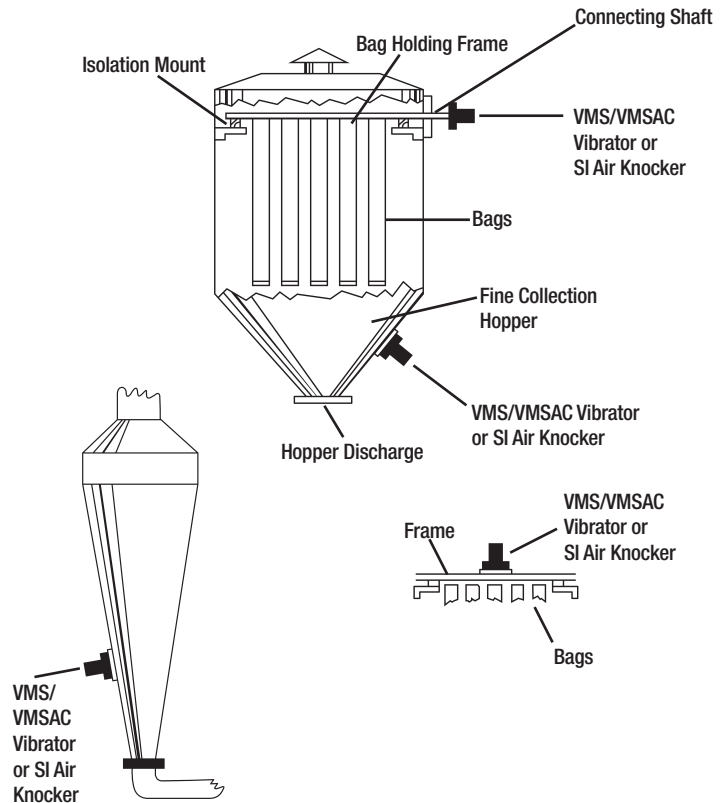
Electrostatic Precipitators and Collection Hoppers

- 3" PMA Rapper delivers shock power to wires and plates to keep them clean of fine particulates and operating at peak power
- Vibra-Might vibrator or SI air knocker keeps collection hopper walls clean to ensure smooth flow of fine particulates to the feeder or discharge for total clean out



Bag Type Dust Collectors and Collection Hoppers

- Vibra-Might vibrator or SI air knocker delivers shock power to keep bags and thimbles clear of fine particulates without fatiguing bags or structure
- Keeps collection hopper walls clean to ensure smooth flow of fine particulates to the feeder or discharge for total clean out



Cyclone Collectors

- Air knockers deliver a single penetrating impact at the optimum rate to keep walls free and clear of fine particulates
- Vibra-Might vibrator or SI air knocker prevents material buildup due to moisture or stickiness of fine particulates



The Cleveland Vibrator Company has been driving innovations in materials handling since 1923. From our corporate headquarters in Cleveland, Ohio, and in partnership with HK Technologies located in Salem, Ohio, we've met

the challenges of more than 15,000 customers all around the globe in a vast array of industries. Our comprehensive product line includes air-piston, rotary electric, electromagnetic, turbine and ball vibrators, as well as a wide variety

of fabricated feeders, vibratory screeners, ultrasonic screeners, vibratory conveyers and vibratory tables used for light, medium and heavy-duty industrial applications.