



bps best
process
solutions, inc.

CONTENTS

Best Process Solutions, Inc. (BPS)	3
Industrial Electric Vibrators	4
Industrial Electric/Air-Powered Vibrators	5
Joggers/Light Duty Tables	6
Vibrating Tables	7
Vibratory Feeders and Conveyors	8
Vibratory Feeders/Screeners	9
Bulk Bag Dischargers	10
Bulk Bag Dischargers/Fillers	11

YOUR BEST SOURCE FOR BULK PROCESSING EQUIPMENT

Best Process Solutions, Inc., is a sales, engineering and manufacturing company that was founded to fill a void that exists in the areas of recycling and bulk material handling. BPS was founded as a family-owned business. With our strong family values, we are dedicated to providing our customers with the highest quality products and services.

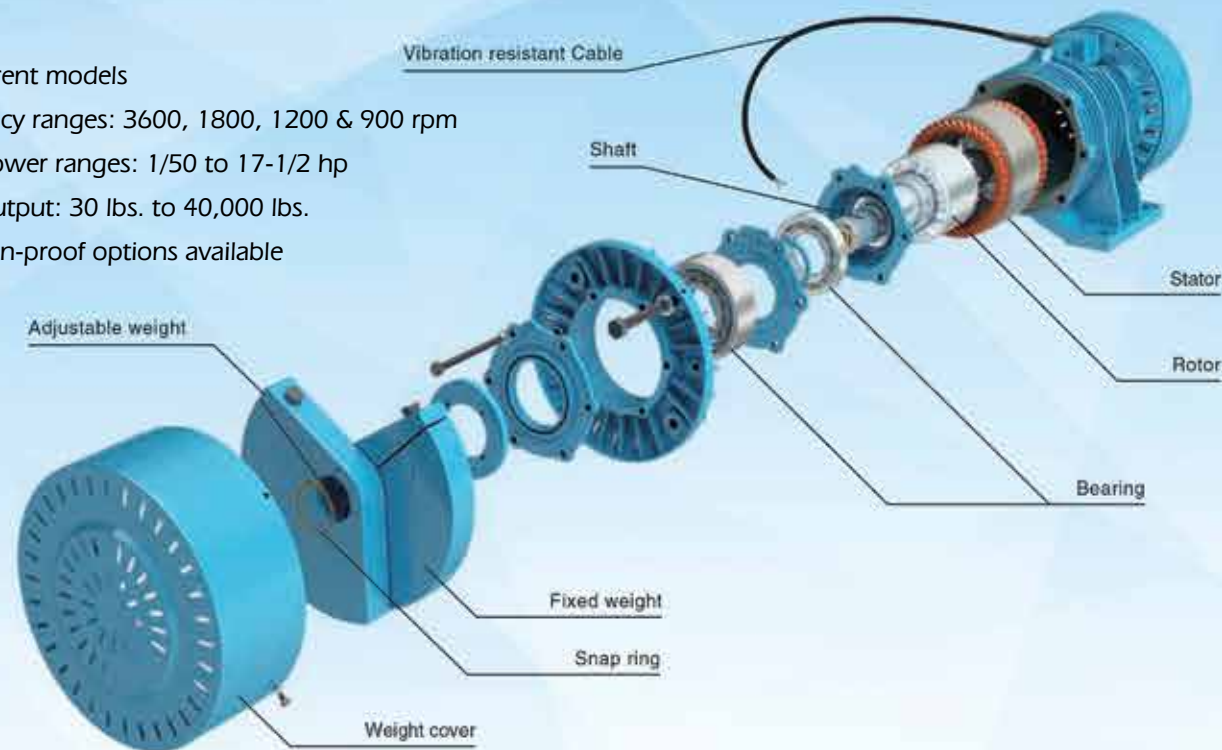
With over 100 years of combined experience, BPS is committed to develop and implement the most advanced technologies in the areas of recycling and bulk material handling. We have partnered

with some of the most advanced technological companies in the world to provide the best solutions for our customers' requirements. BPS understands that every application is unique, which is why we work with our customers to provide a custom-engineered solution for each process.

We are grateful for the continued loyalty and support of our customers, sales representatives and vendors. We look forward to continually working together to strengthen old relationships and cultivate new ones.



- 53 different models
- Frequency ranges: 3600, 1800, 1200 & 900 rpm
- Horsepower ranges: 1/50 to 17-1/2 hp
- Force output: 30 lbs. to 40,000 lbs.
- Explosion-proof options available



Rotary Electric Vibrator Construction –
The rotary electric vibrators feature a simple mechanism wherein vibrating force is created by rotating unbalanced weights attached to both ends of an induction motor shaft.

The rotary electric vibrators feature a simple mechanism wherein vibrating force is created by rotating unbalanced weights attached to both ends of an induction motor shaft.

These vibrators (usable under all weather conditions) prevent the unbalanced weights from dropping down during adjustment so that they can be handled with complete safety. At the same time, they have been designed to extend the service life of their bearings.

Heavy-duty construction guarantees long life and excellent field performance — including ductile iron castings, steel end covers and high alloy fasteners. All units can be mounted horizontally or vertically.

Long-life bearings insure peak, long-term performance. Our B-10 bearing life is unsurpassed in the industry. Smaller units are furnished with ball bearings, which are sealed for the life of the bearing. Larger units employ both ball and roller bearings with grease fittings.

Zero% to 100% force adjustment is available on all but our smallest model. Unlike the competition, BPS offers continuous operation at the maximum force on all models.

High-performance design features

- The highest force-to-motor-weight ratio in the industry.
- Low noise level (55 db. (A) at 5’.
- Dust-tight construction and splash-proof design make these motors suitable for dusty, dirty environments as well as outdoors in rain or snow, ensuring maximum up time.

- Provides consistent vibration on vibratory feeders, screeners, conveyors and tables.
- Terminal junction box and cable feature compression type Belleville locking washers to prevent loosening.

Air Piston Vibrators

The air piston vibrators eliminate bridging and plugging of materials. They are designed for use on bins, hoppers, chutes, railcars, trucks and more.

Air piston vibrators can be direct impact or air cushioned. Direct impact provides high-energy output for difficult materials. Air cushioned prevents metal-to-metal contact and reduces noise.



Single Impact Vibrators

The single impact vibrator acts as a pneumatically operated sledgehammer with force control. Single impact vibrators create a direct impact, which makes them ideal for use with sticky materials because they are less likely to cause packing compared to continual vibration. The use of ported exhaust reduces noise level making them very tolerable in working environments.

Vibrator — Two Poles



Vibrator Speed

3000 RPM @ 50 HZ
3600 RPM @ 60 HZ

Vibrator — Four Poles



Vibrator Speed

1500 RPM @ 50 HZ
1800 RPM @ 60 HZ

Vibrator — Six Poles



Vibrator Speed

1000 RPM @ 50 HZ
1200 RPM @ 60 HZ

Vibrator — Eight Poles



Vibrator Speed

750 RPM @ 50 HZ
900 RPM @ 60 HZ



Model JT (Jogger Tables)

Our Model JT (Jogger Tables) are designed to settle and compact powdered materials in whatever mold or container that your application requires. These small vibrating tables are designed for tabletop operation and are able to handle loads up to 50 lbs. With 115v electromagnetic drives, our JT models are ideal for lab and factory use. These models are equipped with a variable amplitude controller built into the table. We offer three deck sizes; all of them are shipped wired and ready for operation. All you need to do is plug it in and turn it on!

Model JT-710-10 is our smallest jogger table. Its vibrating surface measures 7" x 10" and has a hard plastic deck. This unit is designed to handle a maximum load of 10 lbs.

Model JT-1420-50 is our intermediate sized jogger table. Its vibrating surface measures 14" x 20" and has a hard maple wooden deck. This unit is designed to handle a maximum load of 50 lbs.

Model JT-1722-50 is our largest jogger table. Its vibrating surface measures 17" x 22" and has a hard maple wooden deck. This unit is designed to handle a maximum load of 50 lbs.

Model LD (Light Duty)

Our Model LD (Light Duty) tables are designed to settle and compact powdered materials in molds and containers. They are also used to remove bubbles in liquid plastics, concrete mixes and many other materials. These units are designed for tabletop or support base operation and are able to handle loads up to 200 lbs. With 115v drives, our LD models are ideal for lab and factory use. These models are offered with either air or electric drives.

Model LD-A (Light Duty Pneumatic Tables)

Equipped with quiet operating, air-cushioned piston vibrators. We offer three deck sizes; all of them are shipped with a filter regulator lubro control (FRL), hand valve and 5' hose with fittings. Our models are listed below:

Model LD-A-1212-1200 is our smallest light-duty table; 12" x 12" vibrating surface, 100 lbs. maximum load.

Model LD-A-1818-1200 is our intermediate sized light-duty table; 18" x 18" vibrating surface, 150 lbs. maximum load.

Model LD-A-2424-1300 is our largest light-duty table; 24" x 24" vibrating surface, 200 lbs. maximum load.

Model LD-E (Light Duty Electric Tables)

Equipped with a variable amplitude controller built into the table. We offer three deck sizes; all of them are shipped wired and ready for operation. All you need to do is plug it in and turn it on.

Model LD-E-1212-300 is our smallest light-duty table; 12" x 12" vibrating surface, 100 lbs. maximum load.

Model LD-E-1818-400 is our intermediate sized light-duty table; 18" x 18" vibrating surface, 150 lbs. maximum load.

Model LD-E-2424-500 is our largest light-duty table; 24" x 24" vibrating surface, 200 lbs. maximum load.

Model VF (Flat Deck)

The BPS Model VF (Vibratory Flat Deck) is a convenient tool for condensing and compacting a wide assortment of materials. Larger model VF tables are also used to densify large molds, totes, and drums and can be incorporated into many different processes. Our electric VF tables can be operated at 230v/480v. Other voltages are available upon request (example: 380v, 415v, 575v). When power requirements are limited, we also offer a variety of Air Piston Flat Decks as well.

The Electric VF-E (Vibratory Flat Deck) includes:

- Twin Electric Vibratory Motors
- Air Isolation Mounts or Coil Springs
- FR (Filter Regulator)

The Air Piston VF-A (Vibratory Flat Deck) includes:

- Air Piston Vibrator
- Air Isolation Mounts
- FRL (Filter Regulator Lubricator)

Optional Features:

- Manual Air Controls
- Auto Controls
- Electric and Air
- Load Cells with Controls

Model VG (Grid Deck)

The BPS Model VG (Vibratory Grid Deck) is able to lift and vibrate material between the rollers of a roller conveyor. As the material is conveyed down the conveyor, this can be a densification station and can be automatically or manually operated. Our electric GF tables can be operated at 230v/480v. Other voltages are available upon request (example: 380v, 415v, 575v). When power requirements are limited, we also offer a variety of Air Piston Flat Decks as well.

The Electric VG-E (Vibratory Grid Deck) includes:

- Twin Electric Vibratory Motors
- Air Isolation Mounts
- FRL (Filter Regulator Lubricator)

The Air Piston VG-A (Vibratory Grid Deck) includes:

- Air Piston Vibrator
- Air Isolation Mounts
- FRL (Filter Regulator Lubricator)

Optional Features:

- Manual Air Controls
- Auto Controls
- Electric and Air
- Load Cells with Controls



Model EFL (Electromagnetic Drive)

Model EFL (Electromagnetic Feeders Line) is a versatile feeder that can deliver both quantity and accuracy of material.

This is achieved with the use of a fast and dribble variable controller along with a scale and weigh controls. These feeders are offered in a number of sizes, shapes and capacities to suit your bulk processing and conveying requirements.

Trough Size:

- Trough sizes range from 1-1/2" wide x 12" long to 8" wide x 36" long

Features:

- Variable Speed Control
- 115v/1ph/60hz AC Power Input Standard

Trough and Pan Shapes:

- Vee
- Tube
- Narrow Flat Pans
- Wide Flat Pans

Materials:

- Mild Steel
- Stainless Steel 304 or 316

EFL Electromagnetic Feeder Applications:

- Packaging
- Batching
- Mixing
- Drying
- Weighing



Model AFL (Pneumatic Drive)

Model AFL (Air Feeder Line) is a versatile feeder that can deliver both quantity and accuracy of material. Air operation makes it suitable for hazardous areas when furnished with an explosion-proof solenoid or manual hand valve. These feeders are offered in a number of sizes, shapes and capacities to suit our customers' needs. They are ideally suited for the controlled flow of bulk material to secondary process operations. Typical noise rating ranges from 70-75 decibels at five feet from the unit, which is well below the 85-decibel, required noise level by OSHA.

Standard drive position is below the feeder pan with coil spring isolation mounting. Available are special tray sizes and shapes with dust-tight covers, flexible inlet boots, tray linings for wear or product impact noise reduction are available.

Troughs and Pan Shapes:

- Vee
- Tube
- Narrow Flat Pans
- Wide Flat Pans
- Standard controls consist of a filter/regulator and lubricator with solenoid valve 115v/1ph/60hz AC or 24v DC and 5 ft. of hose. Vibrator drive is complete with enclosed exhaust and muffler. The option of weigh control is also available

Materials:

- Mild Steel
- Stainless Steel 304 or 316

AFL (Air Feeder Line) Applications:

- Packaging
- Drying
- Batching
- Weighing
- Mixing



Model CFL (Dual Motor Feeder)

The Concept Feeder Line (CFL) units are powered by twin rotating motor vibrators designed to give a linear and straight-line type conveyance action. The unit shown above incorporates the optional Inertial Isolation System (IIS) Base. The patent-pending IIS is designed to eliminate the transfer of vibratory energy to support structures and buildings.

Design Advantages:

- Reduced stress due to welding
- No weld on the unit is subjected to the "push-pull" stresses of the vibratory energy
- Reduced weight = reduced force requirements
- Reduced force requirement = reduced stress levels
- Smooth linear operation

Design Features:

- Brute force design = proven reliability
- Coil springs or rubber isolation mounts
- Based-mounted or suspended
- Pan sizes can be customized to your customers' specific requirements

Trough and Pan Shapes:

- Tube
- Narrow Flat Pans
- Wide Flat Pans

Materials:

- Mild Steel
- Stainless Steel 304 or 316

Options:

- Dust Tight Covers
- Pan Liners
- Stainless Steel Noses
- Standard Base
- Inertial Isolation System (shown above)



Model CSL (Dual Motor Screener)

The Concept Screener Line (CSL) units are powered by twin rotating motor vibrators designed to give a linear and straight-line type conveyance action. The unit propels the product forward with a positive conveyance action designed to offer better stratification than typical sloped gravity or orbital type screeners.

Design Advantages:

- Reduced stress due to welding
- No weld on the unit is subjected to the "push-pull" stresses of the vibratory energy
- Reduced weight = reduced force requirements
- Reduced force requirement = reduced stress levels
- Smooth linear operation

Design Features:

- Brute force design = proven reliability
- Coil springs or rubber isolation mounts
- Based-mounted or suspended
- Screener sizes can be customized to your specific requirements

Screen Options:

- Finger Screen
- Wire Mesh
- Perforated Plate
- Wedge Wire

Materials:

- Mild Steel
- Stainless Steel 304 or 316

Options:

- Dust Tight Covers
- Multiple Screen Decks
- Multiple Discharge Locations
- Also available in Single Motor Designs
- Standard Base
- Inertial Isolation System



Model MTD-2.5K

The BPS Model MTD-2.5K Bulk Bag Discharger is a reliable unit for unloading large capacity bulk bags. Its upper uni-strut frame allows for the customer to adjust for different bag heights as required.

Standard MTD-2.5K Features:

- Bag Lifting Frame
- Untie Hopper with 3" Dust Exhaust Port
- Stationary Paddles
- Fork Truck or Hoist Loading Capabilities
- 2500 lb. Capacity

The Bag Lifting frame can be used by both an overhead hoist and a fork truck for easy operator loading. The lifting frame comes with spring-loaded bag strap retainers for bag replacement.

The Untie Hopper allows easy access to untie the bag through the operator access door. This door also provides safe dust control during operation and sending it through a 3" outlet for dust collection.

The Stationary Paddles support the bag when unloading.

Optional Features:

- Manual Air Controls
- Auto Controls
- Agitation Paddles
- Transition Hopper / Surge Hopper
- Metering Device
- Partial Bag Unloading
- Load Cells with Controls



Model MTD-4K

The BPS Model MTD-4K Bulk Bag Discharger is a reliable unit for unloading very large capacity bulk bags. With the use of 4" tubular construction, the robust design of this discharger allows for unloading of bulk bags up to 4,000 lbs. capacity. The MTD-4K assembly is custom engineered to fit any bulk processing application.

Standard MTD-4K Features:

- Bag Lifting Frame
- Untie Hopper with 3" Dust Exhaust Port
- Stationary Paddles
- Fork Truck or Hoist Loading Capabilities
- 4,000 lb. Capacity

The Bag Lifting frame can be used by both an overhead hoist and a fork truck for easy operator loading. The lifting frame comes with spring-loaded bag strap retainers for bag replacement.

The Untie Hopper allows easy access to untie the bag through the operator access door. This door also provides safe dust control during operation and sending it through a 3" outlet for dust collection.

The Stationary Paddles support the bag when unloading.

Optional Features:

- Manual Air Controls
- Auto Controls
- Integrated Hoist
- Agitation Paddles
- Transition Hopper / Surge
- Hopper
- Metering Device
- Partial Bag Unloading
- Load Cells with Controls



Model BBD-4K

The BPS Model BBD-4K is a large capacity bin vibrating discharger. This reliable and robust unit is used to unload large capacity bulk bags that may need additional force to discharge the material. The BBD-4K uses heavy isolation mounts along with an 1800rpm vibratory motor to agitate the material inside the bag.

Standard BBD-4K Features:

- Bag Lifting Frame
- Untie Hopper with 3" Dust Exhaust Port
- Fork Truck or Hoist Loading Capabilities
- Agitation Hopper (Electric Vibratory Motor)
- Manual Electric Controls
- 4,000 lb. Capacity

The Bag Lifting frame can be used by both an overhead hoist and a fork truck for easy operator loading. The lifting frame comes with spring-loaded bag strap retainers for bag replacement.

The Untie Hopper allows easy access to untie the bag through the operator access door. This door also provides safe dust control during operation and sending it through a 3" outlet for dust collection.

The Agitation Hopper assists in unloading hard-to-remove products.

Optional Features:

- Auto Controls
- Integrated Hoist
- Transition Hopper / Surge Hopper
- Metering Device
- Load Cells with Controls



Bulk Bag Fillers

Our Model BBF (Bulk Bag Filler) is designed to fill any size bulk bag with high accuracy. With a proven low maintenance design, our bulk bag fillers offer years of trouble-free maintenance.

Standard Features:

- Inflatable fill head that offers a dust-free seal when loading: Operator slides the spout of the bulk bag over the fill head and turns the selector switch to "Inflate." The fill head inflates providing a dust-free seal for filling. Once the bag is full, the operator then turns the selector switch to "Deflate" and removes the bag.
- Dust port with dust cartridge
- Retractable pneumatic bag strap support pins
- Bag loading surface with pallet retaining flange on three sides
- Manually adjustable bag supports for varying bag heights; 42"-60" high bags standard. (Consult factory for additional bag heights)
- No electricity is required for our standard filler
- Great for low ceiling heights

Optional Features:

- Vibratory deck
- Roller Conveyor
- Screw jack
- Metering Device
- Bags support area extensions
- Bag inflation
- Drum adapter
- Load cells
- Systems controls

COMPLETE SYSTEMS



We take pride in our innovative solutions, design, technology, manufacturing, installation and service. BPS's commitment is to provide its customers with state-of-the-art technology and service of the highest quality. Our personnel have over 100 years of combined experience, and that experience is evidenced during the design and equipment selection for your specific application. Our systems are not built to a "cookie cutter" standard but are designed around individual customer requirements. Each phase of the project is professionally monitored to ensure complete customer satisfaction. Understanding our customers' needs and expectations is the key element of our success and continued customer loyalty.



1071 Industrial Parkway North
Brunswick, OH 44212
330-220-1440
Fax: 330-220-1447
sales@bpsvibes.com
www.bpsvibes.com

Our 30,000 sq. ft. facility in Brunswick, OH, is home to a full technical test laboratory where customers' products and materials can be rigorously tested in a simulated environment to ensure final results.

- BPS products are custom engineered
- UL certified electrical shop
- In-house fabricating and assembly facility
- We are a complete systems integrator
- Our engineering team is sensitive to customers' needs and budget

