

Dry Polymer and Lime Batching and Metering Systems
Sorbent Injection Systems – Mercury and Acid Gas Control



Our innovative and technical experience in the waste water and flue gas / smoke treatment allow us to offer solutions for turnkey installations or integration of new equipment into your process lines. Our many years of experience in storage bin design, discharging, volumetric and gravimetric feeders, mixers and pneumatic conveying allow us to offer complete system packages.

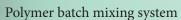
- Soda Ash
- MagOx
- Lime Slurry (Quick/Hydrated)
- PAC
- Cement
- Polymer
- Other Bulk Chemical Handling Systems





Powder Activated Carbon (PAC) system with Bulk Bag Unloader, Volumetric Feeders, and eductor pneumatic converying system







## Vibra Screw Equipment .



Material storage silos & bins



Bulk Bag Unloaders with flexible incline screw conveyors



Paper sack and container dump stations



Volumetric Screw Feeders



Gravimetric Loss-In-Weight Feeders



System & Process Control Packages



Eductor and Wetting Cone Systems



Batch Mix Tanks



Tank Agitator

The ability to provide expert solutions to a wide range of industries comes from Vibra Screw's 65 plus years of developing, designing and manufacturing equipment for the material handling industry. Our team of highly experienced engineers provide industrial solutions designed for safety, reliability and performance.

Being a solution provider in the bulk solids handling industry, our strength comes from R&D, custom design and production capabilities for each individual application.

#### **Powder Activated Carbon Systems**

In the process of combustion at high temperatures, various gases are created and released to the atmosphere. These gases can be toxic and harmful to human health. Powdered Activated Carbon (PAC) is an adsorbent engineered to eliminate such toxic gases like dioxins, organic compounds and other chemicals like mercury.

Injecting PAC to the pipeline at the baghouse filter inlet adsorbs these gases. PAC within captured flue gases like dioxins, and heavy metals are captured by the filter bags and prevent the release to the atmosphere.

Full system control packages are available



Depending on level of accuracy and/or required intelligent control, the system can be provided with either volumetric feeder for 1-2% accuracy of Loss-In-Weight Feeder for accuracy better than 1%



Dry and wet transfer either through eductor system or mixing cone to dissolve material directly on the transfer pipeline



### **BULK STORAGE SYSTEMS**



Bin vent to assure proper air venting when refilling the silo



The Vibra Screw Bin Activator is specifically designed and sized to ensure that the material contained in the silo will flow freely into the feeder system below



Live Bottom Bin ensures positive discharge of material, on demand. Conditions the material to a constant bulk





Material conveying air is provided by positive pressure blowers or compressed air

In addition to flue gas treatment, another area of application is the removal of micropollutants in wastewater cleaning and drinking water treatment.

PAC is commonly used in chemical plants, steel mills, waste disposal facilities, coal-fired power plants, food & beverage, pharmaceuticals and casting plants.

Vibra Screw offers a wide range of activated carbon sytems and components for chemical processing needs, ranging from single screw feeders to complete systems including bins, bulk bag unloaders, flexible screw conveyors and wet & dry conveying systems.

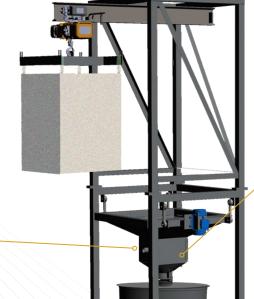
### **BULK BAGS (FIBC) UNLOADING SYSTEMS**



Bulk Bag Unloaders come with multiple suction ports to connect to separate dust collector



Material conveying air is provided by positive pressure blowers or compressed air



Bulk bag pan supports the bag to form a dust tight seal. Pan come with either controlled vibration design or messaging paddles. Bag outlet spout can be reached through large access door.



positive discharge of material, on demand. Volume large enough to hold a full bulk bag



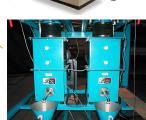
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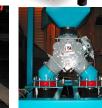


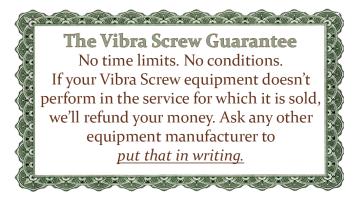


Volumetric and Gravimetric Loss-In-Weight Feeders are available in single or redundant designs.









# **Keeping Dry Materials Moving**

With a wealth of knowledge and experience in the use of controlled vibration to process dry bulk materials, Vibra Screw engineers have devised systems to handle most materials --- probably your material included.

As the leader in dry solids processing, our name is recognized and trusted worldwide in such diverse industries as:

- FOOD
- MINING
- CHEMICAL
- STEEL
- FOREST PRODUCTS

- PLASTICS
- ENVIRONMENTAL CONTROL
- ORDNANCE
- AGRICULTURE
- PHARMACEUTICALS





### VIBRA SCREW INC.

755 Union Blvd , Totowa, NJ 07512 Ph: 973-256-7410 Fax: 973-256-2114 www.vibrascrew.com