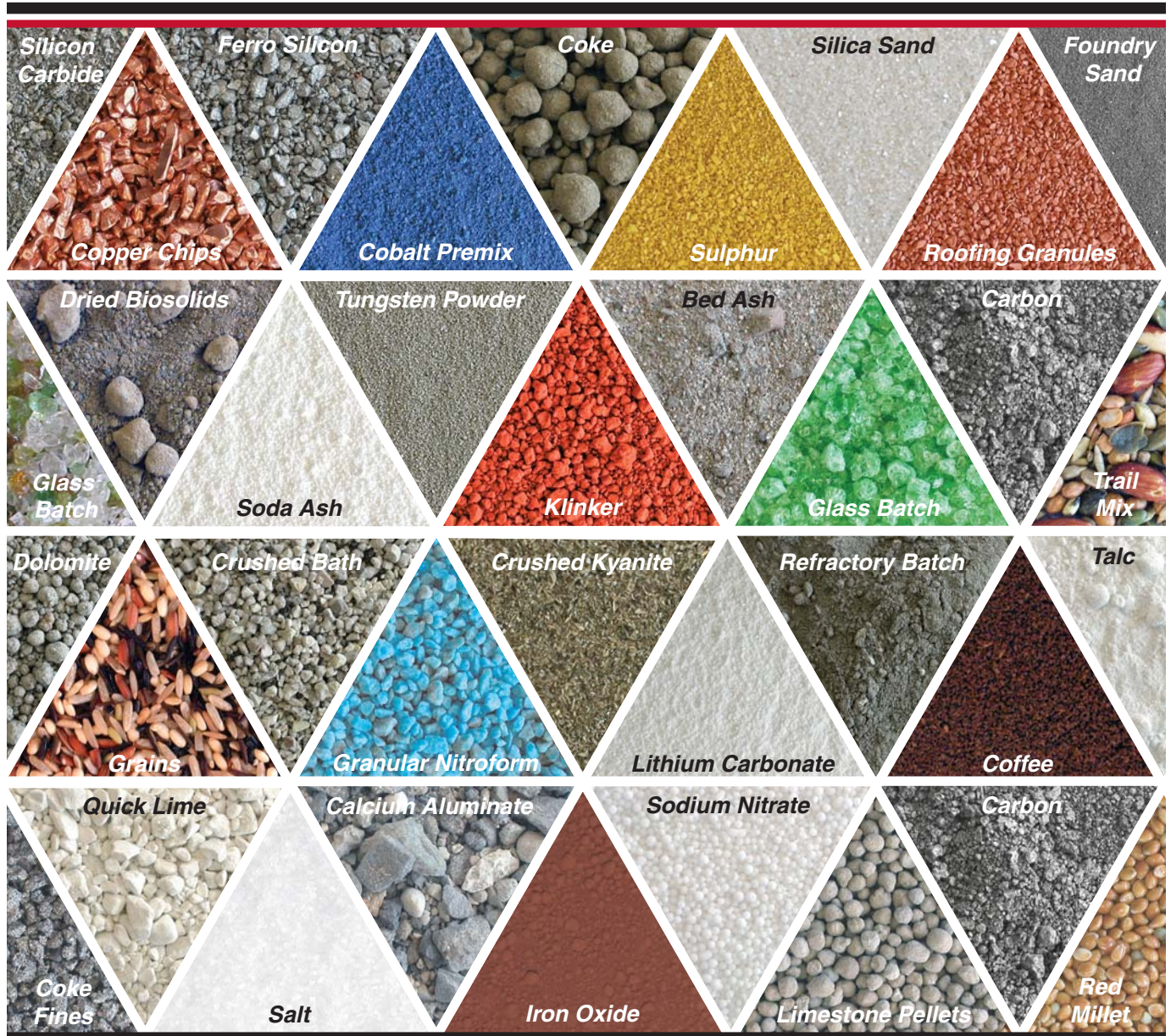


DYNAMIC AIR[®]

Conveying Systems



***Vibratory Equipment for
Dry, Bulk Material Handling***

Vibratory Equipment for Your Processing Needs

Dynamic Air engineers and manufactures vibrating process equipment for a wide variety of industries. Years of experience and many patents worldwide account for our extensive knowledge in this field. Our comprehensive expertise in industrial applications ranges from glass processing equipment to heavy-duty foundry equipment and lighter-duty stainless steel food handling equipment.

Designs and equipment provided by Dynamic Air are innovative and employ many unique process features never before available. We offer cost effective solutions for the most difficult material handling and process applications. We provide state-of-the-art design and manufacturing technology, which includes the implementation of finite element analysis software, for increased product integrity and the latest in manufacturing technology. Dynamic Air produces long lasting, cost effective and more reliable equipment, which not only meets but exceeds the customers' expected performance requirements.



Foundry Alloy Weighing and Batching

This weighing and batching system uses multiple L-Type Vibratory Feeders to feed individual ingredients into one STEDI-FLO™ Vibratory Feeder. The STEDI-FLO Vibratory Feeder is mounted on four load cells, one under each spring support leg. Individual ingredients are weighed in succession until the weighed batch is complete.

All L-Type Vibratory Feeders are pneumatic powered and have multiple slow speeds, as desired, to obtain the highest accuracy of ingredient weight possible. When a batch is complete, all materials are conveyed from the STEDI-FLO Vibratory Feeder to a single destination point.

Industries Served by Dynamic Air Vibratory Equipment

- Agricultural
- Automotive
- Building Products
- Cement
- Ceramic
- Chemical
- Coal
- Dairy
- Detergent
- Food
- Foundry
- Glass
- Grain
- Marine
- Mining
- Petrochemical
- Pharmaceutical
- Plastics
- Pulp and Paper
- Railroad
- Refinery
- Refractory
- Rubber
- Semiconductor
- Steel
- Textile
- Thermal Power
- Tobacco

Vibratory Feeders & Dischargers

GYRO EX™ Bin Activating Feeder and Discharger



The GYRO EX™ Bin Activating Feeder and Discharger produces a controlled gyratory motion to positively withdraw granular materials from bins, storage silos and hoppers at any desired feed rate for a more consistent and reliable discharge.

At the heart of the GYRO EX Bin Activating Feeder and Discharger is the drive that produces a radial force creating a uniform circular motion on both the upper activation cone and the lower discharge cone. It is this annular radial vibratory motion which imparts the force to the material, assuring a more reliable and predictable material discharge. This also minimizes any material stratification in the storage silo or bin and provides a better material mass flow discharge for a first in, first out discharge.

A unique feature of the GYRO EX Bin Activating Feeder and Discharger is that the stored material load is completely supported by the upper bin activation cone which has a lower cone angle than the discharge cone, assuring an uninterrupted and positive discharge of the stored material.

GYRO™ Bin Activating Feeder



The GYRO™ Bin Activating Feeder produces 360 degrees of pure gyratory motion to positively and more reliably discharge granular materials from bins, storage silos and hoppers at any desired feed rate.

In addition, the GYRO Bin Activating Feeder can operate either continuously or as a start and stop operation as might be required for more sophisticated process applications. Also available is an optional variable speed drive, which provides a variable material discharge rate with up to a 400 to 1 turndown ratio for batch weighing operations. Thus high accuracy of individual weighments can be achieved quickly for process efficiency and for precise feeding and bin discharging of almost any material.

GYRO™ Loss-in-Weight Feeder



The GYRO Loss-In-Weight Feeder is both a loss-in-weight feeder and a bin discharger, all in one unit. Using the power of rotary vibration, it generates a pure gyratory motion to feed almost any granular material, irrespective of particle size or difficult handling characteristics. Also, a variable speed controller allows the GYRO Loss-In-Weight Feeder to achieve up to a 400 to 1 turndown ratio for faster feed rates and lower dribble feed rates for high accuracy weighing and batching.

Vibratory Feeders & Dischargers

L-Type Vibratory Pan Feeder



The Dynamic Air L-Type Vibratory Pan Feeder provides excellent performance and reliability for feeding almost any granular material from abrasive silica sand to very fine granular powders. Applications include weighing and batching where

feed control is essential. It is ideal for feeding coolers, dryers, belt conveyors, bucket elevators, weigh hoppers, continuous process systems, and continuous mixers.

The L-Type Vibratory Pan Feeder can be operated with a variable speed controller or in a fixed rate application. It can be stopped instantly without any dynamic movement as seen with a typical electric vibrating motor. Because it is air operated and requires no motor starters, it is ideal for explosion-proof atmospheres. In addition, the L-Type Vibratory Pan Feeder is low in cost and

maintenance and is available in mild steel, abrasion resistant steel or stainless steel.



This air operated L-Type Vibratory Pan Feeder is base mounted. It has the ability to vary the normal flow rate by 100 to 1 ratio, making it ideal for high accuracy weighing and batching.

L-Type Two-Way Vibratory Feeder



The L-Type Two-Way Vibratory Feeder provides instantaneous directional change of flow using two variable frequency air operated linear vibrators specifically designed for reliability and long life.

K-Type Screen Feeder



The K-Type Screen Feeder is a screen and feeder combination using a single or double deck screen with a brute force drive and a single electric vibrating dry granular material from one inch down to 100 mesh particle size. The K-Type Screen Feeder can be flood fed and suspension or base mounted directly below any size surge hopper. The replaceable screen deck can be constructed of a 500 Brinell abrasion resistant steel

or screen mesh with openings manufactured to your exact specification.

K-Type Screen Feeder Feeding into an L-Type Two-Way Feeder



This K-Type Vibratory Screen Feeder is used to convey material from a surge hopper into two different directions as required. The K-Type Screen Feeder screens sand down to 50 mesh and then feeds directly onto a L-Type Two-Way Feeder which can divert into two different directions using the Two-Way Vibratory Feeder.

Vibratory Feeders & Dischargers

Vibratory Bin Discharger



Dynamic Air's Vibratory Bin Discharger is designed to greatly improve the gravity discharging process of difficult-to-handle dry bulk solids which tend to bridge or rathole in storage silos, bins and/

or hoppers. The primary feature of the Vibratory Bin Discharger is that it imparts a gyratory motion for a more even activation of the stored material in the direction of normal flow. In addition, the suspension mountings are designed to allow optimum gyratory motion without restriction in any axis, creating a better and more efficient transfer of energy from the activation cone to the stored materials. As an added benefit, when the gyratory motion is combined with the unique trough design, a larger material volume is activated and the result is more effective discharging.

STEDI-FLO™ Vibratory Feeder



The STEDI-FLO™ Vibratory Feeder provides excellent performance and reliability for feeding almost any granular material from abrasive silica sand to very fine granular powders. Applications include weighing and batching where feed control is essential. It is ideal for feeding coolers, dryers, belt conveyors, bucket elevators, weigh hoppers, continuous process systems, and continuous mixers.

The STEDI-FLO Vibratory Feeder can be operated with a variable speed controller or in a fixed rate application. It is

simple in design and available in a heavy-duty or light-duty construction in either mild steel, abrasion resistant steel or stainless steel. Stainless steel finishes are available in standard or polished construction.

The STEDI-FLO Vibratory Feeder requires very little maintenance since the drive motors are simple to adjust. Replacement of the motors is fast and easy because they are very accessible and removed by just a few bolts.

This STEDI-FLO Vibratory Feeder is installed in a midwestern iron foundry to convey fragile iron castings from an existing vibratory conveyor to an existing casting cooling vibratory conveyor at the rate of 240 castings per hour. The trough is made of abrasion resistant steel and designed for easy replacement. This application uses a suspension mount, which is required because of limited floor space.

Vibratory Feeders & Screens

STEDI-FLO™ Vibratory Screen Feeder



The STEDI-FLO™ Vibratory Screen Feeder is a screen and feeder combination using either a single, double or triple deck screen and a brute force drive with two electric vibrating motors. It is ideal for screening dry granular material from one inch down to 30 mesh particle size.

The STEDI-FLO Vibratory Screen Feeder can be flood fed and mounted directly below any size surge hopper and easily handles abrasive materials like silica sand or fine products such as granulated sugar. The screen deck is easily replaced. Available in either stainless steel or mild steel construction.

Circular Vibratory Screen



The Circular Vibratory Screen is available in single, double or triple deck screens. It can be used to screen almost any material from silica sand to fine powders like calcium carbonate and sugar, and is available in either stainless steel or mild steel construction.

STEDI-FLO Two-Mass Rotating Vibratory Feeder



This STEDI-FLO Two-Mass Rotating Vibratory Feeder is used as a foundry charge feeder to charge scrap metal into a melting furnace. This feeder includes a special gear operated rotating base to feed two different furnaces as required. Also incorporated is a counterbalanced base to isolate the counteracting forces of the vibrating motor feeder and an abrasion resistant and easily replaceable liner.

STEDI-FLO Tubular Vibratory Feeder



This STEDI-FLO Tubular Vibratory Feeder is designed to feed foundry sand to an existing bucket elevator from a surge hopper. It also includes a counterbalanced base to isolate the counteracting forces.

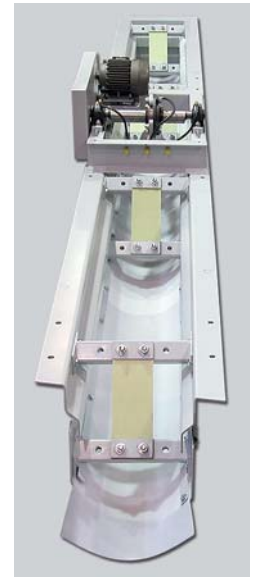
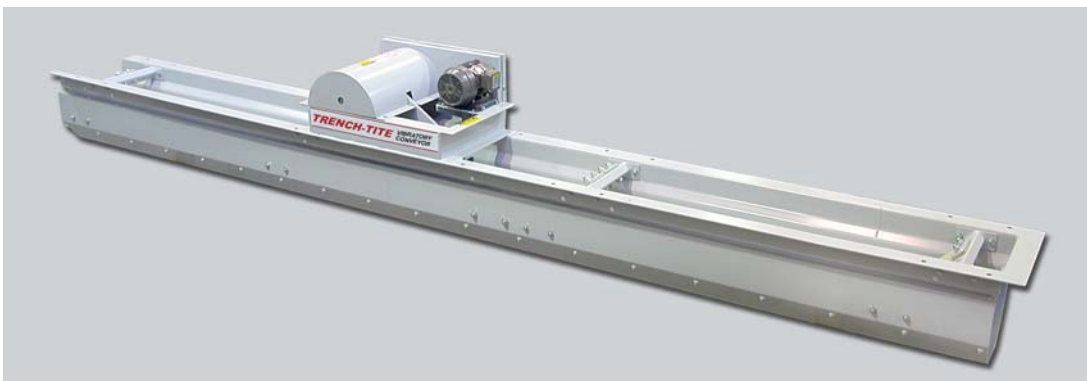
Vibratory Conveyors

STEDI-COIL™ Vibratory Conveyor



The STEDI-COIL™ Vibratory Conveyor is used to convey either sand and castings together or sand and castings separately. This design also uses an abrasion resistant and replaceable conveyor trough and incorporates a heated and fully insulated trough to prevent sticky molding sand from adhering to the trough. Also included is a single but proven eccentric drive and a counterbalanced base to isolate the counteracting forces.

TRENCH-TITE™ Vibratory Conveyor



This TRENCH-TITE™ Vibratory Conveyor is set into a narrow trench and is level with the floor. It is installed in an iron foundry and is used to convey spill sand during a molding operation. Special features include a flexible polymer conveying trough which flexes and prevents any sticky foundry molding sand from adhering to the conveyor and becoming a maintenance issue. The eccentric drive is located just above the floor for easy maintenance. Installation is simple and easy as it is mounted on angles embedded in the trench wall.

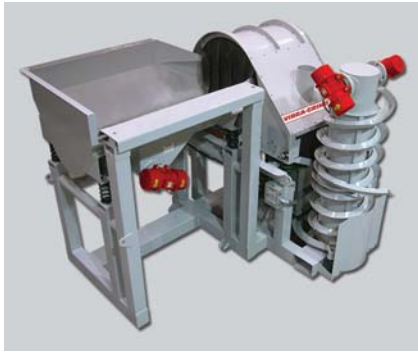
STEDI-FLEX™ Vibratory Conveyor



The STEDI-FLEX™ Vibratory Conveyor is low in cost and simple in design and construction. It includes a counterbalanced base specially designed to isolate the counteracting forces produced in a conventional vibratory conveyor. It is available in any size width or length required and produced in both mild steel and stainless steel construction. A dust tight cover is optional.

Feeders, Shakeouts & Reclaim Systems

Foundry Reclaim Unit



This Foundry Reclaim Unit uses a STEDI-FLO Vibratory Feeder to feed floor scrap from front end loaders onto a reclaim drum feeder. The drum feeder separates large particles such as steel rods, chaplets, etc from sand and steel shot. Any particles larger than ½ inch are fed into a collection hopper for remelting. Anything smaller than ½ inch is fed to a vibrating screen which separates anything larger than 50 mesh to a collection barrel.

The material passing through the 50 mesh screen passes over a magnetic drum which separates steel shot from sand. The steel shot is then deposited onto a spiral elevator and conveyed upwards and into a container for reuse. The 50 mesh sand is then fed onto a different spiral on the same spiral elevator at the midway point and deposited into a container for reuse.

The savings in sand, steel shot and tramp metal removal are considerable and this process lessens the amount of material being trucked away for disposal.

EZ-WERK™ Foundry Shakeout



These EZ-WERK™ Foundry Shakeouts are used to separate sand from castings in iron foundries. They include counterbalanced bases to isolate counteracting forces. The finger decks, which are easily replaceable, are specially designed and fabricated of abrasion resistant steel to maximize the shakeout performance.



STEDI-FLO Foundry Furnace Charge Feeder



This STEDI-FLO Vibratory Feeder is used by an aluminum foundry to charge aluminum scrap into an electric melting furnace. Also included is an electric drive system to move from the loading position to the charge position.

Two-Way Air-Operated Foundry Shakeout Feeder



This Two-Way Air Operated Foundry Shakeout Feeder feeds foundry shakeout sand from a single vibratory feeder into two different directions. It uses two linear electric vibrators along with a replaceable abrasion resistant, steel shakeout deck. In addition, the feed rate is infinitely adjustable by controlling the air pressure and air volume as required.

U.S. and Foreign Patents Pending

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