

# Pneumatic Batch Blender/ Transporter



**WHIRL-AIR-FLOW**

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# pneumatic batch blending for the process industries

Whirl-Air Batch Blender/Transporters can handle a variety of dry materials in a wide range of particle sizes and densities. Pneumatic blending provides thorough, dust-free mixing with extremely low shear and blend times of only two to five minutes. The unique Whirl-Air design uses dense phase pneumatic conveying to deliver the blended batch without segregation to one or more process areas. The Blender/Transporter combination also features the capability to deliver different batch weights to the multiple process areas.

Whirl-Air Batch Blender/Transporters can easily be mounted on a load cell weighing system to weigh ingredients or check weigh a batch. The controls system allows fully automatic operation.

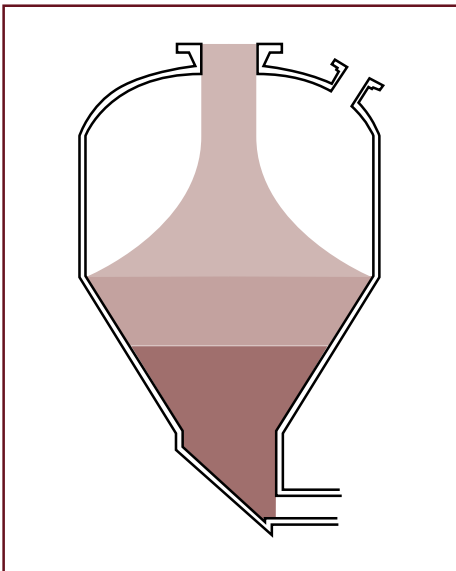
## Batch Blender/Transporter Features

- Five to 500 cu. ft. typical capacities
- Solid State blender controls
- Stainless or mild steel construction
- Designed to A.S.M.E. (if required)
- Shipped fully assembled for immediate installation

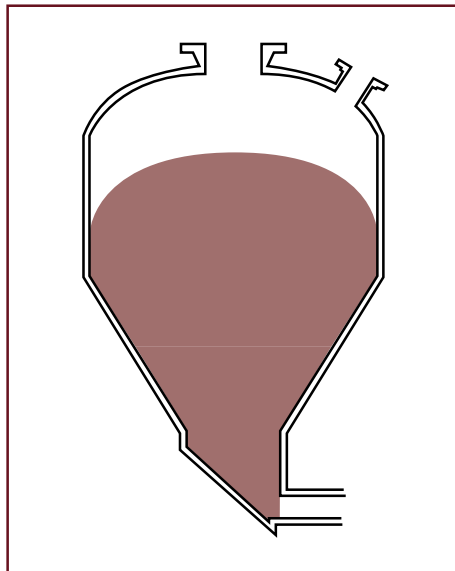
## Typical Batch Blender/ Transporter Product Applications

- Fiberglas Batch
- Cleansers/Detergents
- Ceramic Batch
- Tile Grouts
- Pigments
- Dry Cake Mix
- Pancake Mix
- Cake Mix
- Dry Powdered Cereals
- Soups (Dry Mix)
- Tire Pigments
- Pastrys
- Battery Mix
- Plaster
- Clay Blends
- Pharmaceuticals
- Powder Drink Mix
- Powdered Metals

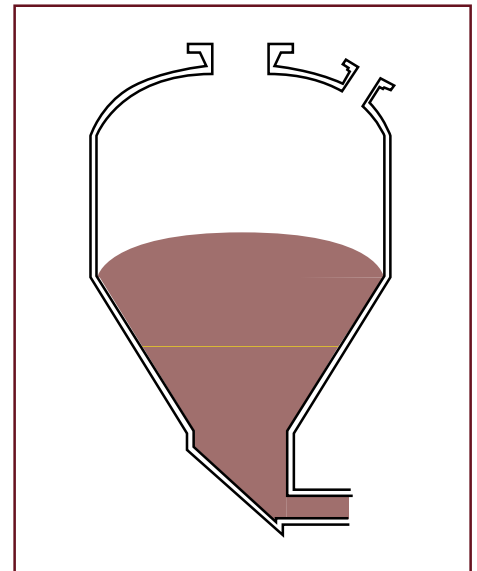
## Batch Blender/Transporter Sequence of Operation



**Filling** - blender is filled by gravity from the batch/scale hopper above. Manual additions can be made using a Whirl-Air manual bag emptier.



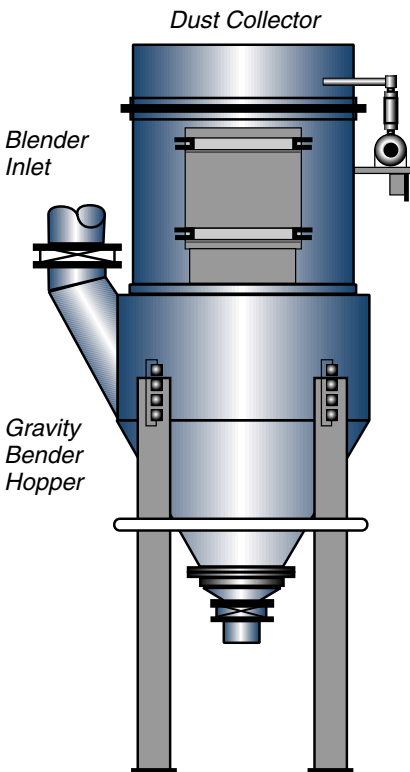
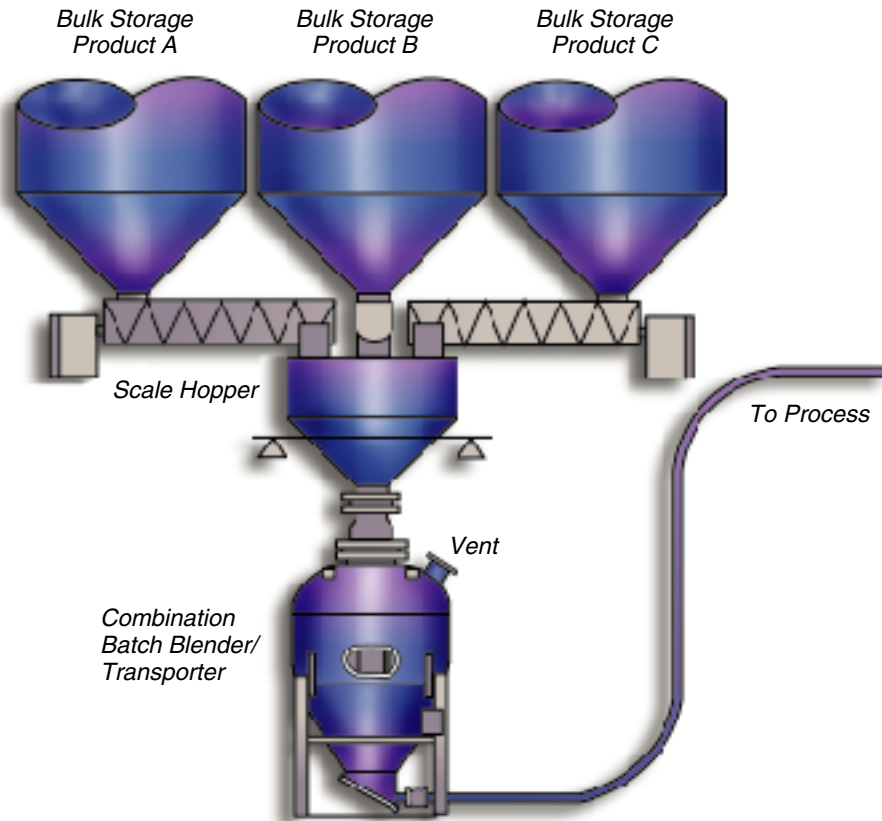
**Blending** - products are homogeneously blended in cycles from two to five minutes using plant compressed air.



**Conveying** - blended product is pneumatically conveyed to process area. Gravity discharge models are also available.

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# typical configurations



## ▲ Typical Automatic System

Overhead storage silos feed product to weigh hopper by screw conveyor or other volumetric feeder. Blender receives weighed batch, blends and conveys mixed batch to process. Whirl-Air often supplies minor or micro ingredient systems to accurately add small weightments to each batch. Whirl-Air typically provides comprehensive systems to fully automate the entire process.

## ◀ Typical Manual System

This self-standing system has a gravity discharge blender with manual filling inlet.

## Options

- **Liquid Addition** - for dust control, adding perfumes to soaps, etc. without balling or clumping.
- **Minor Addition** - can be hand added or weighed automatically for addition to batch prior to blending.
- **Check Scale System** - can be scale mounted to act as a check scale to ensure majors and minors are added to batch prior to blending.
- **Deliver To Multiple Stations** - capable of delivering different batch weights or formulas to multiple process areas.

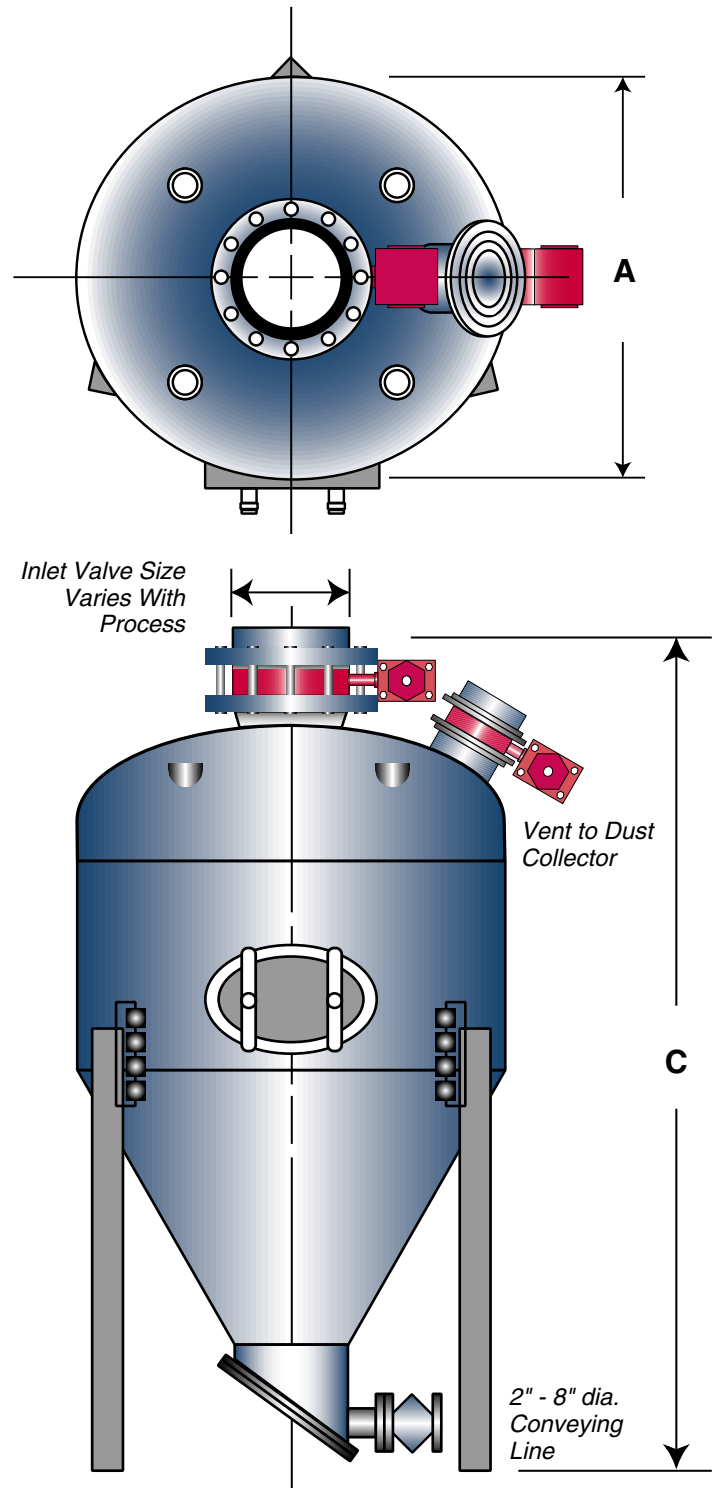
## Typical Materials Handled

- Alumina
- Bentonite
- Borax
- Boric Acid
- Calcium Carnoate
- Cements
- Clays
- Coal
- Cullet
- Silicon Metal
- Titanium Dioxide
- Gypsum
- Dolomite
- Feldspar
- Florspar
- Flavorings
- Flour
- Glass Beads
- Graphite
- Sand
- Soda Ash
- Zinc Oxide
- Diatomaceous Earth
- Iron Powder
- Lead Oxide
- Lead Pigment
- Lime, ground
- Phosphate
- Polyethylene powder
- Salt
- Sugar
- Animal Feeds

# engineering data & specifications

## Typical Capacities & Dimensions

Model	Capacity	A	B
50	5 cu. ft.	3'-6" OD	5'-1"
100	10 cu. ft.	3'-6" OD	5'-7"
150	15 cu. ft.	3'-6" OD	6'-8"
200	20 cu. ft.	3'-6" OD	7'-9"
250	25 cu. ft.	3'-6" OD	8'-10"
300	30 cu. ft.	3'-6" OD	9'-11"
350	35 cu. ft.	5'-0" OD	8'-2"
400	40 cu. ft.	5'-0" OD	8'-8"
500	50 cu. ft.	5'-0" OD	9'-8"
600	60 cu. ft.	5'-0" OD	10'-8"
700	70 cu. ft.	6'-0" OD	10'-3"
800	80 cu. ft.	6'-0" OD	11'-0"
900	90 cu. ft.	6'-0" OD	11'-9"
1000	100 cu. ft.	6'-0" OD	12'-6"
1250	125 cu. ft.	6'-0" OD	14'-3"
1500	150 cu. ft.	6'-0" OD	16'-1"
1750	175 cu. ft.	6'-0" OD	17'-10"
2000	200 cu. ft.	6'-0" OD	19'-8"



Whirl-Air Batch Blender/Transporters are custom built for each specific customer application. Actual dimensions may vary depending on capacity.

Whirl-Air Batch Blender/Transporters are shipped with full electrical wiring and compressed air piping factory installed to minimize installation time and expense.

*Whirl-Air-Flow reserves the right to change product specifications without notice.*



## Air Process Systems

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