

BD SERIES BLENDERS

Batch Weigh Blenders



Compact

Innovative

Capable

Heavy-duty modular construction

with exclusive diamond design slide gate for extremely accurate recipe blending and capacities ranging up to 6000 lbs/hour for up to 8 components.

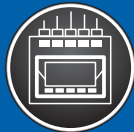
BD Series: Accurate blending. Durable design.

Applications and processes are as unique as the products they produce. The BD Series Batch Weigh Blenders have a variety of options available to adapt the unit to your individual needs.



Adjustable Dispensing Valve Design

Adjustable stroke limiters provide accurate dispensing of all materials, especially for critical and low percentage additives.



Advanced Remote Touch Screen

Color display clearly represents machine current status and function.



Durable, Long Lasting Construction

Stainless steel weigh bin and mix chamber is easy to clean and more durable - providing less wear over time.



Easy to Maintain

Single door access to mix chamber and weigh bin. No tools required! Designed with ease of access for cleaning and maintenance.



Safety Features

When access door is open, incoming compressed air *and* electrical components are shut down for the safety of the operator.



Network Capable

Ethernet cabling combined with A3 Software provides remote access for monitoring, recipe synchronization and data reporting.

BD SERIES BLENDERS

Solutions Tailored for Your Process.

BD Series Batch Weigh Blenders integrate advanced technologies with proven component design to offer a capable and innovative blending solution.

Batch weigh blending operators know that flexibility and accuracy are key to success. BD Series Blenders feature an exclusive diamond-design slide gate metering assembly that provides .5% to 100% recipe range accuracy for free flowing materials.

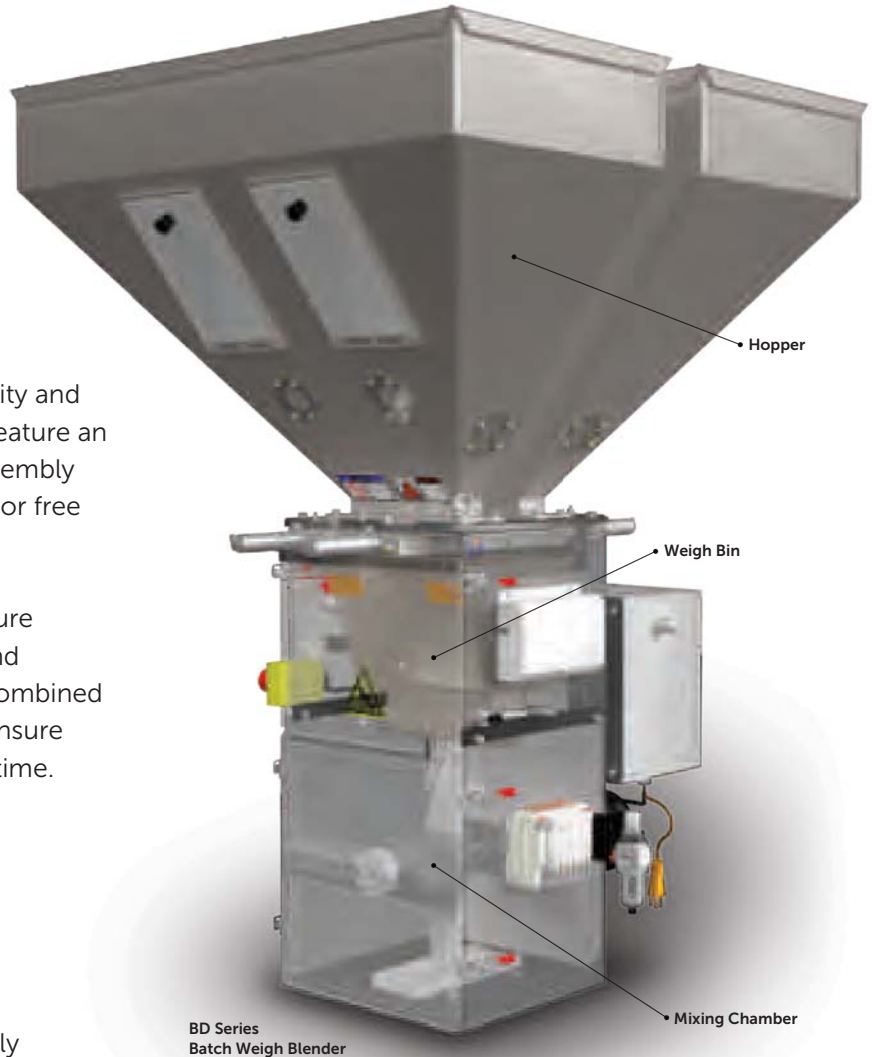
In addition, state-of-the-art process controls ensure predictable, accurate batch-to-batch accuracy and repeatability. Heavy-duty modular construction combined with an efficient industrial mixing chamber help ensure continuous material flow and the right mix every time.

Reliable and versatile blending technology to meet the needs of today's complex processes.

- 1. Durable** – Modular and rugged withstands nearly any production floor environment.
- 2. Innovative** – Intuitive touch screen control interface with color coded functions.
- 3. Capable** - Gravimetric weighing ensures every material is dispensed accurately - *every time*.



Tech Tip: *During cleaning, it is a great time to recalibrate load cells with the provided calibration weights.*



Applications

This series of batch weigh blenders is suitable for a wide range of plastic manufacturing needs. Typical applications include, but are not limited to, the following:

- Injection molding
- Extrusion
- Regind/Recycling
- Blow molding
- Roto-molding

Wide range of materials from virgin to regrind to color and other additives.

Available as machine mount or as a central blender.

BD SERIES BLENDERS

Repeatable, Accurate Blending.



Diamond Valve with Stroke Limiter Design

For applications where small percentages are critical, our innovative diamond valves with stroke limiter design provides extremely accurate material dispensing. The advanced control uses established material flow characteristics to actuate the valve as needed.

Gravimetric Weigh Bin

Stainless steel weigh bin is mounted on a pair of externally mounted load cells. The load cells communicate to the controller the actual weight of each material.

The weigh bin is easily removed for cleaning and calibration of load cells.



Mixing Chamber

After all materials have been weighed, the weigh bin releases the material into the mixing chamber and the mixing process begins. Material is mixed thoroughly to ensure a homogenous blend of material.



As in the case of the weigh bin, the mixing chamber is easily disassembled and reassembled for cleaning.



Tech Tip: No tools are required for regular usage and maintenance of the BD Series batch weigh blender.

Robust, Easy-to-use Touch Screen.



Main operating screen indicates blender recipe and status.



Recipe entry features a wide range of parameters including type, percentages, retry and alarm modes for each material.



Values are entered with an intuitive, large easy-to-read entry panel.

Innovative, Flexible Technology.

Recipe entry formats designed to fit the needs of any industry or application. The BD Series Batch Weight control panel provides three distinct methods of entering recipe data and operating instructions.



EZ Mode provides quick recipe entry.

Recipe Entry Modes

EZ Mode

Only need to specify additive (color) and regrind material percentages. Virgin material weights are automatically calculated.

Percentage Mode

Similar to EZ mode, except all ingredients including virgin materials need to have a percentage entered.

Parts Mode

An alternative method of entering material weights and proportions.



A wide variety of on-going operating results are available at any time.



Setup and maintenance menus walk the user with easy-to-follow instructions.



Audible and visual alarms are clearly identified on the display panel.

BD SERIES BLENDERS

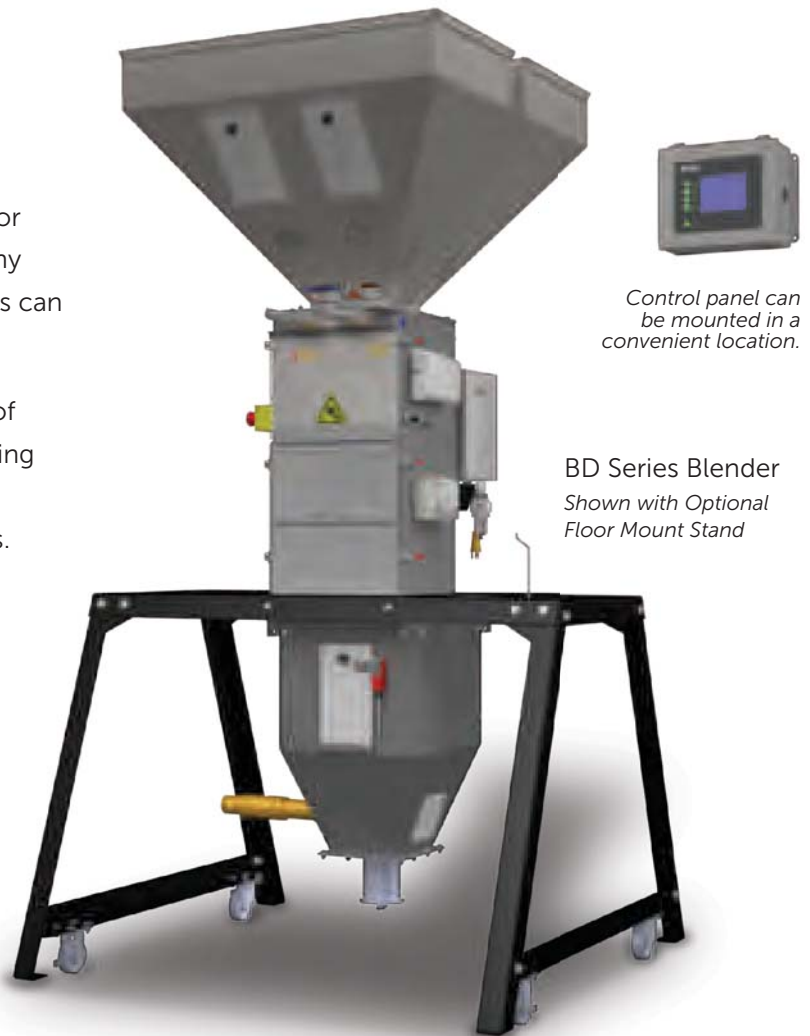
Configurations

Choosing a Blender

When determining which BD Series Blender is right for your operation, the first thing to consider is how many materials you intend to blend. The BD Series Blenders can accurately blend up to eight materials.

The next parameter would be to consider the types of materials you expect to blend. Whether you're blending pellets, regrind or other materials - BD Series has a configuration to meet your operational requirements.

Finally, each production environment has unique throughput rate needs. With the BD Series, the blending rates range up to 6,000 lbs/hour - a perfect compliment to any production floor.



Control panel can be mounted in a convenient location.

BD Series Blender
Shown with Optional
Floor Mount Stand



Tech Tip: Many operators find it useful to use an extra bin for staging the next recipe, in particular other additives such as colors.

Options to Help You Get More from Your Production Floor.

Floor Mount Stands

The floor mount stands with integrated take-off box allows you to feed multiple machines from one blender. The advantage of this is economy of scale - one large blender for less than the price of two medium blenders...

Low Level Proximity Sensors

Located in the Material Bins - notifies you when material is low, so that you do not run out of material and potentially run bad product. Keeps the production line flowing with less downtime and waste.

Easy Integration

AEC BD Blender can be integrated into an AEC Material Handling system or any other Material Handling system. It has a plug and play option for any system.

Removable Hoppers

Some models have removable hoppers for easy color change.

Specifications

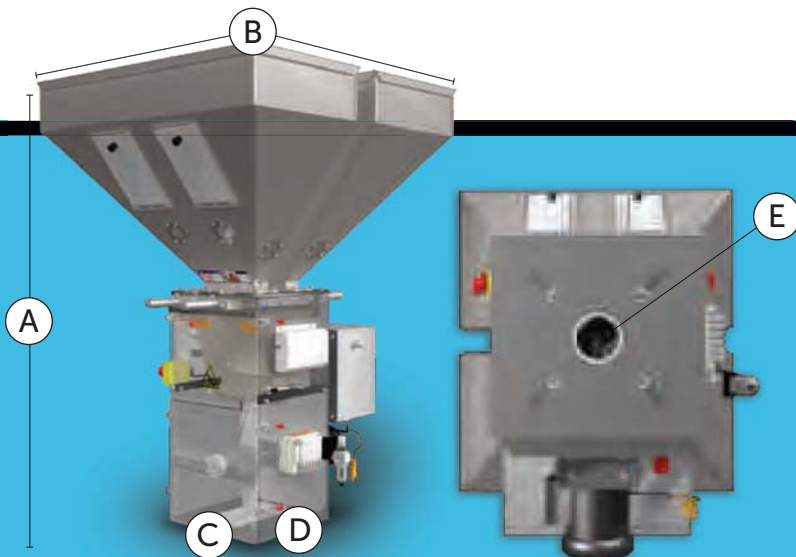
BD Series Blenders

Model	BD-200	BD-500	BD-900	BD-2500	BD-4000	BD-6000
Max. Blending Rate	200 lbs/hr (90 kg/hr)	500 lbs/hr (227 kg/hr)	900 lbs/hr (410 kg/hr)	2500 lbs/hr (1135 kg/hr)	4000 lbs/hr (1815 kg/hr)	6000 lbs/hr (2725 kg/hr)
Number of Materials to be Blended	2-4	2-6	2-8	2-8	2-8	2-8
Slide Gate Size: Majors	2.0" (50 mm)	2.0" (50 mm)	2.0" (50 mm)	2.5" (63 mm)	3.0" (76 mm)	3.0" (76)
Slide Gate Size: Minors	1.5" (38 mm)	1.5 (38 mm)	1.5 (38 mm)	2.0 (50 mm)	3.0 (76 mm)	3.0" (76 mm)
Supply Hopper Capacity: Majors	0.7 cu ft (20 L)	1.4 cu ft (40 L)	1.4 cu ft (40 L)	3.0 cu ft (85 L)	7.5 cu ft (212 L)	7.5 cu ft (212 L)
Supply Hopper Capacity: Minors	0.2 cu ft (5 L)	1.0 cu ft (28 L)	1.0 cu ft (28 L)	2.7 cu ft (77 L)	6.0 cu ft (170 L)	6.0 cu ft (170 L)
Weigh Hopper Capacity	0.18 cu ft (50 L)	0.18 cu ft (50 L)	0.38 cu ft (11 L)	0.82 cu ft (23 L)	1.23 cu ft (34 L)	2.17 cu ft (61 L)
Typical Batch Size	4 lbs (1.8 kg)	4 lbs (1.8 kg)	8 lbs (3.6 kg)	25 lbs (11.3 kg)	35 lbs (15.8 kg)	45 lbs (20.4 kg)
Mixer Capacity	0.25 cu ft (7 L)	0.25 cu ft (7 L)	0.56 cu ft (16 L)	1.1 cu ft (31 L)	2.72 cu ft (77 L)	2.72 cu ft (77 L)
Mixer Motor Size	1/6 HP (.12 kW)	1/6 HP (.12 kW)	1/6 HP (.12 kW)	1/3 HP (0.25 kW)	1.0 HP (0.75 kW)	1.0 HP (0.75 kW)
Mixer Speed	21 RPM	21 RPM	21 RPM	22 RPM	22 RPM	22 RPM
Load Cell Capacity	2 @ 3kg	2 @ 3kg	2 @ 5kg	2 @ 10kg	2 @ 15kg	2 @ 20kg
Blender Weight	375 lbs (170 kg)	375 lbs (170 kg)	450 lbs (205 kg)	650 lbs (295 kg)	1100 lbs (500 kg)	1100 lbs (500 kg)

Dimensions

Model	BD-200	BD-500	BD-900	BD-2500	BD-4000	BD-6000
"A" Overall Height	42.2" (1071 mm)	51.5" (1307 mm)	56.5" (1435 mm)	69.25" (1759 mm)	85.5" (2172 mm)	89.5" (2273 mm)
"B" Square of Top of Bin	32.0" ² (814 mm ²)	36.75" ² (933 mm ²)	40.0" ² (1016 mm ²)	46.25" ² (1175 mm ²)	57.5" ² (1459 mm ²)	57.25" ² (1459 mm ²)
"C" Horizontal Dimensions Bottom Flange	11.0" (279 mm)	11.0" (279 mm)	15.0" (381 mm)	17.0" (432 mm)	22.0" (559 mm)	22.0" (559 mm)
"D" Vertical Dimension of Bottom Flange	12.0" (305 mm)	12.0" (305 mm)	14.0" (356 mm)	18.0" (457 mm)	24.0" (610 mm)	24.0" (610 mm)
"E" Discharge Opening	3.0" (76 mm)	3.0" (76 mm)	3.0" (76 mm)	4.0" (102 mm)	4.0" (102 mm)	4.0" (102 mm)

* Shipping weight does not include packaging materials, such as pallets, cardboard, etc.



Configured for Your Needs.

BD Series Blenders are supplied with valves, but if hard to flow material such as regrind is required, the blenders can be fitted with an optional RAM Feeder (Regind Auger Metering). BD Series Blenders are designed to overcome the unique challenges of material flow.

Get More From Your Production Floor.

ACS Group provides a wide range of blending and feeding system for metering resin and other plastics processing additives into extruders, injection molding machines and other process equipment. Choice of batch weigh blenders, gravimetric loss-in-weight continuous blenders, single and multi-component volumetric additive feeders and weigh hoppers allow us to recommend the best blending technology for your process. ACS Group also provides extrusion scrap reclaim systems and coextrusion control systems.

