



BLEND & RECLAIM

BD SERIES GRAVIMETRIC BATCH BLENDERS



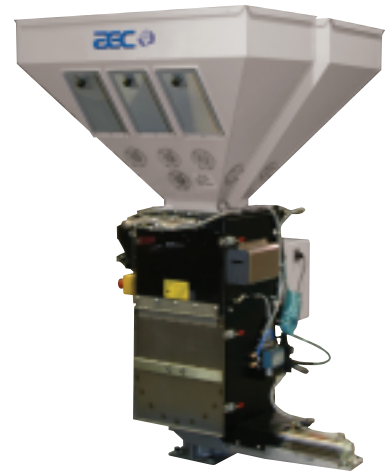
MODEL BD-150

4 Component Blender
Rate: 1-150 lbs/hr
0.5-68 kgs/hr



MODEL BD-500

2-6 Component Blender
Rate: 10-500 lbs/hr
5.0-227 kgs/hr



MODEL BD-900

2-8 Component Blender
Rate: 10-900 lbs/hr
5.0-405 kgs/hr



MODEL BD-2500

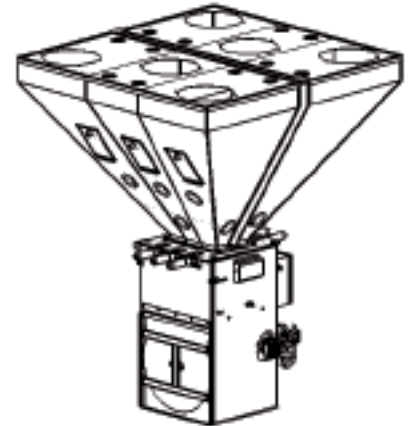
2-8 Component Blender
Rate: 100-2500 lbs/hr
50-1130 kgs/hr

MODEL BD-4000

2-8 Component Blender
Rate: 500-4000 lbs/hr
227-1814 kgs/hr

MODEL BD-6000

2-8 Component Blender
Rate: 500-6000 lbs/hr
227-2722 kgs/hr



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BD SERIES GRAVIMETRIC BATCH BLENDERS

Integrated Blending Control System Off-the-Shelf Control With Proven Reliability User-Friendly, Menu Driven Interface

AEC's new Allen-Bradley PLC-based blender controller provides state-of-the-art process control at your fingertips. Operator-friendly controls simplify operation, store up to 20 recipes and provide unmatched metering accuracy for up to six ingredients, especially below 2%. The PanelView touch-screen interface displays user-friendly, menu-driven interface screens for complete control and monitoring of any batch blending operation. A serial printer port is included and an optional Ethernet port is available.



Programmable entry screens for all three recipe modes (up to six components)



Real time display of process rate and material usage of each ingredient

FEATURES

- Patented Control System
- Touch-screen interface in a remote-mount NEMA 12 (IP 54) enclosure
- Two screens allow total control and monitoring of the blending process
- Constant display of actual material used
- Load cell signal conditioning technology improves reliability and is unaffected by electrical noise
- Redesigned pneumatic and electrical systems improve metering accuracy and blender rate
- Electrical panel meets applicable specifications, with 220 volt operation and CE declaration available
- Integral alarm light and horn indicates material feed problems
- Ethernet module available for off-line monitoring, control, and remote troubleshooting
- Three types of recipe entry formats are available to the operator:
 - "EZ" mode meters color and additives as a percentage of the virgin material (most common in injection molding)
 - "Percentage" mode meters all ingredients as a percentage of the overall batch (most common in extrusion and blow molding)
 - "Parts" mode allows for ratio recipe entry (e.g., 50:1)



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MODEL BD-2500

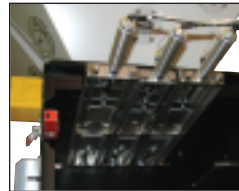
Optional Accessories

- Low-level proximity sensors for supply hoppers
- Hopper drain tubes with slide gate for quick cleanout
- Removable hoppers for quick color changes
- Bolt-on additive feeders for up to 8 component mixing
- Regrind auger metering with agitated straight wall hopper
- Ethernet port/module for remote communication
- A3 communication software to link all of your A-B controlled blenders
- Panasonic color touch-screen in lieu of standard PanelView 550 that can control up to an 8-component blender
- Siemens control to replace entire Allen Bradley system with optional Profibus DP Slave communications



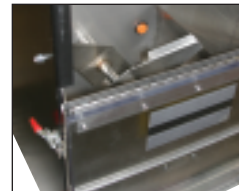
ACCURACY DRIVEN

- Allen Bradley PLC based control system with touch-screen interface
- Exclusive diamond design slide gate metering assemblies provide for 1/2% to 100% recipe range for free flowing pellet materials
- Dual precision 0.02% span cantilever load cell weighing system



HEAVY-DUTY MODULAR CONSTRUCTION

- Integral one piece frame with removable metering components, weigh hopper, mixer drawer, and mixer agitator
- Heavy-duty slide gates with case hardened stainless steel components (most models)



INDUSTRIAL MIXING CHAMBER

- Efficient design ensures homogenous bi-directional mixing of all components
- Removable mixer drawer with fully welded front seam and piano hinged access door
- Removable keyed stainless steel mixer agitator



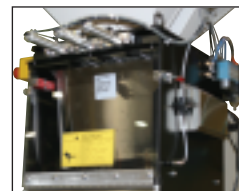
CONTINUOUS MATERIAL FLOW

- Oversized slide gate on hopper #3 aids flow of regrind material
- Adjustable slide gate stroke limiters provided for accurate metering of minor ingredients
- Oversized weigh hopper with full dump bottom door for larger regrind percentages



EASY MATERIAL CLEANUP

- Powder coated inside and out, supply hoppers provide easy wipe down surfaces and eliminates rusting
- Machined polycarbonate access doors with push-to-close latches



SAFETY AND CONTROL

- Safety-interlocked access system shuts off air and electricity if mixer door is opened
- Heavy-duty industrial mixing motor with thermally protected interrupt
- Multiple recipe entry modes for simplicity of control and operation



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BATCHING BLENDERS

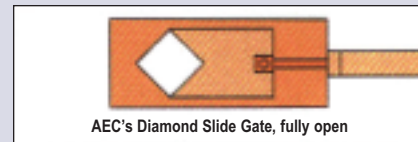
- Gain-in-weight operation
- Meter components to a specified weight set point—each pellet of material is weighed
- Accuracy defined in terms of overall batch
- Integral dynamic mixer
- Ingredients metered sequentially into weigh hopper
- Low-maintenance load cell design
- “E-Z” recipe format to maintain color to virgin ratio. Allows the operator to make simple regrind recipe changes without having to recalculate

Slide Gate vs. Auger

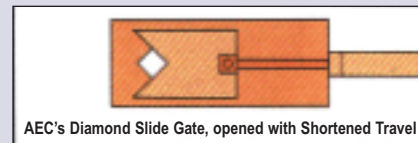
Slide gates are used for free-flowing pelletized materials. Augers are best suited for non-free-flowing materials (e.g., sticky resins, sheet scraps, etc.)

Diamond Slide Gate Metering for Maximum Accuracy

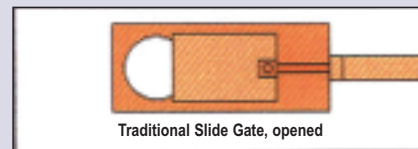
The exclusive diamond slide gate design features a proportional cross section to accurately dispense the material at any gate position. Coupled with the controller's ability to learn the gate-open time to achieve the rate, this blender provides accurate batch-to-batch consistency. The diamond slide gate rivals the performance of augers for metering of free-flowing pelletized resin in batch ratios as low as 1% on standard-sized blenders and even lower on large batch units. Adjustable cylinder stroke maximizes control of any free-flowing pellet.



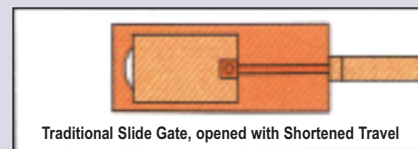
AEC's Diamond Slide Gate, fully open



AEC's Diamond Slide Gate, opened with Shortened Travel



Traditional Slide Gate, opened



Traditional Slide Gate, opened with Shortened Travel



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