

**AEC**

Material Handling | Process Cooling | Temperature Control | Size Reduction

BD-100 SERIES

Gravimetric Blender

Technical Specifications

The BD-100 Series batch weigh blenders are setting new industry standards for accuracy and homogeneous blend quality with quick-acting material dispense valves, unmatched mixing performance, and an easy to use high resolution color touchscreen interface.

With 3 different ways to enter blend recipes, the BD-100 Series blender is perfect for Injection Molding, Extrusion, Blow Molding or any other process. Combined with its easy to clean design, the BD-100 Series blender allows you to minimize material changes and maximize machine efficiency.

Features

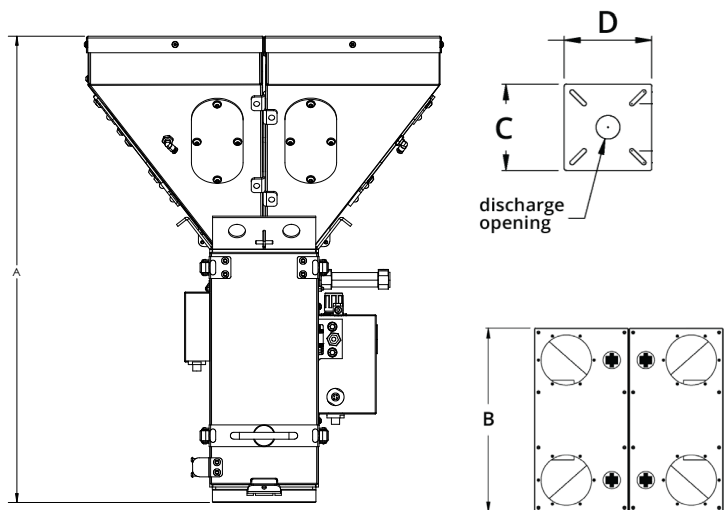
Standard Features

- 7" High resolution color touchscreen display and a powerful Allen Bradley PLC control
- Unmatched mixing performance - new high efficiency paddle delivers the most consistent batch-to-batch mix in the industry
- 100 recipe storage book
- Alarm light & audible alarm
- **3 Recipe Modes**
 1. Percentage recipe entry - Ingredients metered as a percentage of the batch
 2. 4-component "EZ" mode recipe entry - Color and additives metered as a percentage of the virgin
 3. "Parts" mode ratio recipe entry (i.e. 500:1)
- Feeding accuracy of $\pm 0.1\%$ of batch over time
- Stainless steel supply hoppers
- Precision 0.01% span accurate cantilever load cell weigh system
- Interlocked safety system shuts off air and power if mix chamber is opened
- 115/1/60 supply voltage
- **3 Material Dispense Valve Options**
 1. Vertical plunger valve for bulk virgin and additives
 2. Corner valve for regrind
 3. Micro-pulse valve for small additive amounts

Optional Features

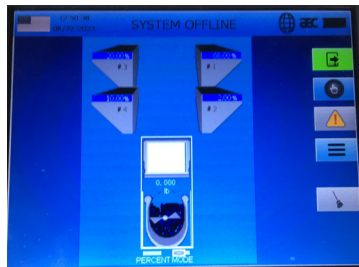
- Low-level proximity sensor for each supply hopper

Product Diagrams



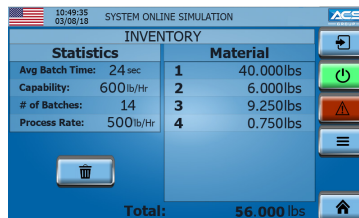
Model	A, in. (mm.)	B, in. (mm.)	C, D, in. (mm.)	Weight lb (kg)
BD-M-100	27 (686)	20.5 (522)	6.3 x 6.3 (160 x 160)	110 (50)

Advanced Controls



Blender Home Screen

Visual representation of the entire blender system to quickly and easily see the current recipe, operation mode, and the weight of the current batch.



Inventory Statistics

Quickly see the average batch time and current pounds per hour process rate to identify throughput targets.



Recipe Book

Enter and store up to 100 unique recipes.

Specifications

Model	Max. Blending Rate* lbs./hr. (kgs./hr.)	# of materials to be blended	Dispense gate size in. (mm.)	Supply hopper capacity cu. ft (l)	Weigh hopper cap. cu.ft (l)
100	100 (40)	2-4	1.14 (29)	0.3 (8.5)	0.05 (1.5)

* Maximum blending rates based on running three components at 80% virgin pellets, 18% free-flowing regrind and 2% pelletized additive

Model	Typical batch size lbs. (kgs.)	Mixer			Load cell capacity kgs.	Discharge opening in. (mm.)
		Capacity cu.ft. (l)	Motor size HP (kW)	RPM		
100	1 (0.45)	0.1 (3)	1/12 (0.06)	20	1 @ 3 kgs.	1.57 (40)