



PB SERIES POWDER BLENDERS

The PB Series blender is designed for continuous extrusion applications for powder, pellet, or micro-pellet materials and offers the most homogeneous blend available compared to common batch-type blenders or mixers. Materials like PVC, wood flour, and additives can be efficiently blended for your operation. Twin screw feeders can also be provided for non-free-flowing materials. Throughput rates range up to 16,500 lbs./hr. (7,500 kgs/hr) in continuous extrusion applications, including compounding, profile, fiber and sheet.



PB Blender

STANDARD FEATURES

- Mezzanine mount configuration
- Blender automatically adjusts feeders to match extruder rate at the ratio required
- Capable of starve or flood feeding of extruder
- Supply hoppers with reload valves
- Stainless steel and nickel plated aluminum construction
- Precision vibrating wire digital load cells
- Feed augers with DC motors
- Touch-screen operator panel features easy menu-driven graphic format, RS-232 printer port, recipe storage book, and material usage information
- Hopper lids arranged for AEC SRC vacuum receivers and PHL or SLC hopper loaders. Lids may also be cut for other loaders at no additional charge provided detailed drawings are submitted with the order.
- 230/1/60 supply voltage

OPTIONAL FEATURES

- Twin screw feeder with integral agitator for non-free-flowing or cohesive materials
- High temperature model, 350°F (175°C)
- Vacuum loading equipment
- Liquid additive introduced below blender
- MultiLine™ control system (based on an industrial PC and required for multiple blender applications)
- Communications capability (Ethernet, Modbus, Profibus, etc) MultiLine system only

SPECIFICATIONS

All of these blenders are custom designed to fit the specific application. Each feeder must be sized to handle the full range of each component, so minimum and maximum percentages must be specified up front. The range can usually change in the future by changing auger assemblies, but an initial range must be specified. A Quote Request form must be completed to properly size and price the blender.

No. of Components	Height, in. (mm)	Width, in. (mm)	Depth, in. (mm)	Weight, lbs. (kg)
1	70 (1780)	36 (915)	40 (1020)	350 (160)
4	70 (1780)	54 (1375)	42 (1070)	500 (230)
6	80 (2035)	60 (1525)	50 (1270)	750 (345)
8	80 (2035)	60 (1525)	55 (1400)	1000 (455)

Minimum and maximum processing (extruder) rates must be included with order to avoid processing and manufacturing delays. Orders forwarded without proper minimum and maximum processing rates, as well as individual ingredient recipe percentages, cannot be entered or scheduled until the information is received.

Augers have minimum and maximum output rates based on auger and motor size.

Bulk density of materials, particularly regrinds, can greatly impact blender performance and rate. Consult the factory for guaranteed blending rates.

Material samples are required for testing in order to guarantee actual processing rates. Consult your AEC sales contact for shipping instructions and the amounts of each material required for testing. Typical amounts required are 100 pounds for major ingredients and 25 pounds for minor ingredients.

TYPICAL POWDER MATERIALS

Type	Feeder	Materials
Free-flowing or non-cohesive	Single screw feeder without agitation	PVC powder or compound; Sodium carbonate; Color concentrate; Blowing agent; Various ground materials
Free-flowing or non-cohesive	Single screw feeder with agitation	Wood flour; Oat, wheat, or rice hulls; Knaff; Hemp; Talc
Non-free-flowing or cohesive	Twin screw feeder with agitation	Calcium carbonate; Talc; Clay; Titanium dioxide (TiO ₂); Various wax granules; UV stabilizers; Stearates; Pigments

All materials must be the proper mesh size suitable for processing with the equipment. Obtain samples of all materials and consult the factory if in doubt of any of the materials to be blended or fed.



Twin screw, agitated powder feeder



PBW feeder for wood flour