

Brief Description

The AccuMeter® Series is designed to blend a wide range of materials in continuous extrusion applications, and offers the most homogenous blend available compared to batch type blenders, feeders or mixers. The feeders are mounted on precision load cells, continuously weighing the output of each component.

The material flow is constantly monitored; any changes in properties, i.e. bulk density, pellet size, etc. are compensated for, and have no affect on the accuracy of the blended material.

The AccuMeter® Series mass flow weigh hopper learns the extruder rate, continuously sending the data to the Allen-Bradley control system. The material feed rates automatically adjust to match the extruder rate in order to maintain a consistent blend into the extruder throat. The system can be set up to flood feed or starve feed, and can accommodate most extrusion processes.

Standard Features

- Automatically adjusts individual feeders to match the extruder rate at the exact ratio required
- Upper material refill hoppers with refill valves
- Individual component weigh hoppers
- Lower mass flow weigh hopper assembly
- Allen-Bradley COMPACTLOGIX™ programmable controller
- PanelView Plus 1000 CE 10.5 in. color touch screen
- PWM-DC or inverter duty AC motors, depending on model - provides precision metering with wider recipe ranges
- Precision 0.02% analog or 0.0001% digital load cells, depending on model, provide accurate weight information
- Storage book for up to 50 recipes
- Feeder trending
- Full diagnostics
- Complete inventory and material usage information
- Alarm outputs
- 115 or 230/1/60 supply voltage



AccuMeter® Control System

The Allen-Bradley control system consists of a COMPACTLOGIX™ programmable controller and PanelView Plus color touch screen interface. The off-the-shelf programmable controller provides reliability and a large support network. The PanelView Plus CE 1000 10.5 in. color touch screen interface features a compact, flat-panel design. Using the latest operator interface technology, it is optimized for value and ease of use.



Allen-Bradley control system interface



AMP 5000 8-component blender with agitated regrind hopper and CS65 powder feeder



Motor drive panel

AccuMeter® AMP Series Blenders for *General Blending*

✓ denotes availability

Model number	Max. output ②		Number of components						
	Lbs./hr.	Kgs./hr.	2	3	4	5	6	7	8
AMP 500	500	225	✓	✓	✓	✓	✓	✓	✓
AMP 1000	1,000	450	✓	✓	✓	✓	✓	✓	✓
AMP 1500	2,500	1,140	✓	✓	✓	✓	✓	✓	✓
AMP 5000	5,000	2,280	✓	✓	✓	✓	✓	✓	✓
AMP 10000	10,000	4,545	✓	✓	✓	✓	✓	✓	✓
AMP 15000	15,000	6,800	✓	✓	✓	✓	✓	✓	✓

AccuMeter® AMC Series Blenders for *Compounding*

✓ denotes availability

Model number	Max. output ②		Number of components						
	Lbs./hr.	Kgs./hr.	2	3	4	5	6	7	8
AMC 500	500	225	✓	✓	✓	✓	✓	✓	✓
AMC 1000	1,000	450	✓	✓	✓	✓	✓	✓	✓
AMC 1500	2,500	1,140	✓	✓	✓	✓	✓	✓	✓
AMC 5000	5,000	2,280	✓	✓	✓	✓	✓	✓	✓
AMC 10000	10,000	4,545	✓	✓	✓	✓	✓	✓	✓
AMC 15000	15,000	6,800	✓	✓	✓	✓	✓	✓	✓

AccuMeter® AMF Series Blenders for *Fiber Applications*

✓ denotes availability

Model number	Max. output ②		Number of components						
	Lbs./hr.	Kgs./hr.	2	3	4	5	6	7	8
AMF 500	500	225	✓	✓	✓	✓	✓	✓	✓
AMF 1000	1,000	450	✓	✓	✓	✓	✓	✓	✓
AMF 1500	2,500	1,140	✓	✓	✓	✓	✓	✓	✓
AMF 5000	5,000	2,280	✓	✓	✓	✓	✓	✓	✓
AMF 10000	10,000	4,545	✓	✓	✓	✓	✓	✓	✓
AMF 15000	15,000	6,800	✓	✓	✓	✓	✓	✓	✓

Note: 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.

② Important information concerning the maximum blending rate listed above:

- Augers have minimum and maximum output rates based on auger and gearbox size.
- Rates and capacities are based on free-flowing virgin pellets with a bulk density of 35 lbs./ft³.
- Bulk density of materials, particularly regrinds, can greatly impact blender performance and rate.
- Actual rates will vary. Consult the factory for guaranteed blending rates.
- All materials must be free-flowing and **dry**.
- Material samples are required for testing prior to shipment for guaranteed rates. Consult the Colortronic Sales Department for shipping instructions and for the amounts of each material to send for testing. Typical amounts required are 100 lbs. for major ingredients and 25 lbs. for minor ingredients.

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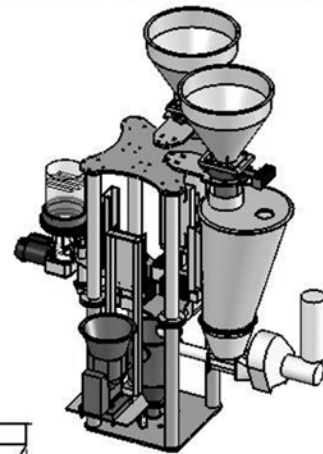
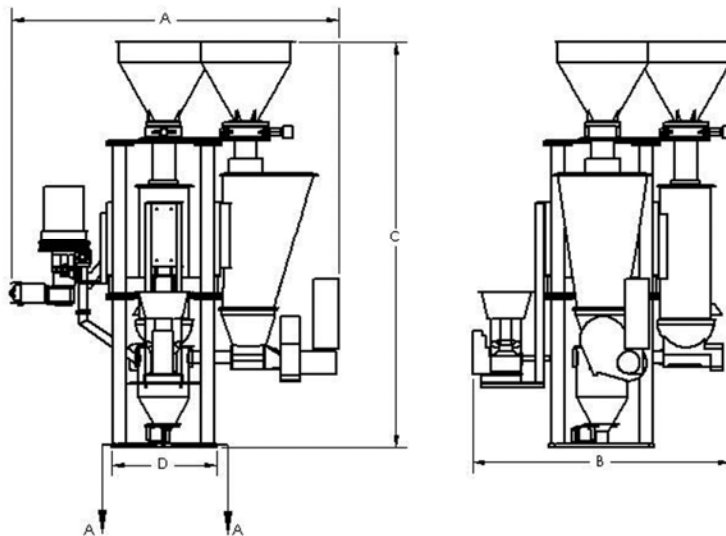
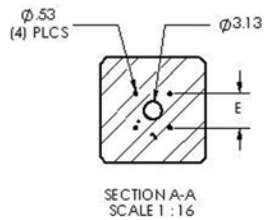
AccuMeter® Options

✓ denotes availability

Description	Availability
Agitated feeders for powders and other non-free-flowing materials	✓
Mezzanine mounting stand with 4" tube stub	✓
Low-level, solid-state proximity sensor for each supply hopper	✓
Supply hopper lids cut for non-Colortronic vacuum receivers or loaders; per hopper. Includes cutout and bolt hole pattern only – special adapters supplied at an additional charge.	NC
Agitated regrind supply and weigh hoppers for regrind material (per component).	✓

Typical AccuMeter® Feeding System

Blender Model	A In (cm)	B In (cm)	C In (cm)	D In (cm)	E In (cm)
4-component	56 (142)	46 (177)	72 (183)	18.5 (47)	6 sq. (15 sq.)
6-component	58 (147)	54 (137)	82 (208)	28 (71)	6 sq. (15 sq.)
8-component	70 (178)	66 (168)	88 (234)	28 (71)	6 sq. (15 sq.)



AccuMeter® Feeder Output Charts

Based on Variable Frequency AC Inverter Drives - Auger Output Tables (Approximate)

Cubic feet (liters) per hour

Auger size OD	Gearbox ratio	Minimum auger speed	Minimum output ft ³ /hr. (liters/hr.)	Maximum auger speed	Maximum output ft ³ /hr. (liters/hr.)
3" (76.2 mm)	20:1	5 rpm	4.00 (117)	175 rpm	104 (4,125)
	10:1	10 rpm	8.00 (235)	350 rpm	208 (8,255)
2" (50.8 mm)	20:1	5 rpm	1.14 (30)	175 rpm	34 (1,080)
	10:1	10 rpm	2.28 (61)	350 rpm	69 (2,160)
	5:1	20 rpm	4.57 (123)	700 rpm	138 (4,320)
1 ⁵ / ₈ " (41.2 mm)	20:1	5 rpm	0.71 (20)	175 rpm	23 (710)
	10:1	10 rpm	1.43 (40)	350 rpm	47 (1,415)
	5:1	20 rpm	2.86 (80)	700 rpm	93 (2,850)
1" (25.4 mm)	20:1	5 rpm	0.17 (4)	175 rpm	5 (165)
	10:1	10 rpm	0.34 (9)	350 rpm	10 (335)
	5:1	20 rpm	0.68 (19)	700 rpm	21 (675)
¾" (19 mm)	20:1	5 rpm	0.06 (2)	175 rpm	2 (75)
	10:1	10 rpm	0.14 (4)	350 rpm	5 (150)
	5:1	20 rpm	0.28 (8)	700 rpm	9 (300)
½" (12.7 mm)	20:1	5 rpm	0.014 (0)	175 rpm	0 (16)
	10:1	10 rpm	0.03 (0)	350 rpm	1 (33)
	5:1	20 rpm	0.06 (1)	700 rpm	2 (67)

Pounds (Kilograms) per hour @ 35 lbs./cu. ft. (560 kgs./cu. m.)

Auger Size OD	Gearbox Ratio	Minimum auger speed	Minimum output Lbs./hr. (Kg/hr)	Maximum auger speed	Maximum output Lbs./hr. (Kg/hr)
3" (76.2 mm)	20:1	5 rpm	140 (63)	175 rpm	3,635 (1,650)
	10:1	10 rpm	280 (127)	350 rpm	7,270 (3,305)
2" (50.8 mm)	20:1	5 rpm	40 (18)	175 rpm	1,205 (545)
	10:1	10 rpm	80 (37)	350 rpm	2,410 (1,095)
	5:1	20 rpm	160 (74)	700 rpm	4,820 (2,190)
1 ⁵ / ₈ " (41.2 mm)	20:1	5 rpm	25 (10)	175 rpm	815 (395)
	10:1	10 rpm	50 (22)	350 rpm	1,630 (740)
	5:1	20 rpm	100 (45)	700 rpm	3,265 (1,485)
1" (25.4 mm)	20:1	5 rpm	6 (3)	175 rpm	180 (80)
	10:1	10 rpm	12 (5)	350 rpm	360 (165)
	5:1	20 rpm	24 (11)	700 rpm	720 (325)
¾" (19 mm)	20:1	5 rpm	2 (1)	175 rpm	80 (35)
	10:1	10 rpm	5 (2)	350 rpm	160 (70)
	5:1	20 rpm	10 (4)	700 rpm	320 (145)
½" (12.7 mm)	20:1	5 rpm	0.5 (0.2)	175 rpm	20 (9)
	10:1	10 rpm	1 (0.4)	350 rpm	40 (15)
	5:1	20 rpm	2 (0.9)	700 rpm	80 (35)

Note: These tables represent **approximate** output values and *may not* be achievable, given a particular application and materials. Consult the factory for guaranteed rates.

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