

Weigh Blenders

ADVANCED
BULK & CONVEYING

Advanced Bulk and Conveying, Inc., is a supplier of the extensive line of Maguire Products weigh scale blenders. These gravimetric blenders are designed to meet the wide variety of applications and requirements within the plastics industry. All models dispense and blend all materials by weight for continuous and unfailing accuracy. Maximum blend rates range from 300 to 5,000 pounds per hour, depending on the model. Up to 12 components can be controlled.

Modular approach to design results in quick access to any part of the machine. It also permits a wide selection of user-installed blender options, should your requirements change in the future. Hopper compartments may be altered; feeders may be added; software is preprogrammed with many options for the future. These are blenders you won't outgrow and at volumetric blender prices.

Series 1800

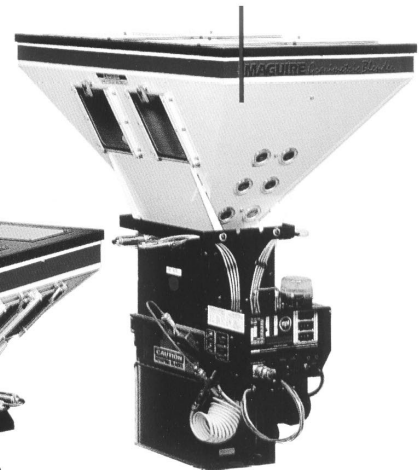
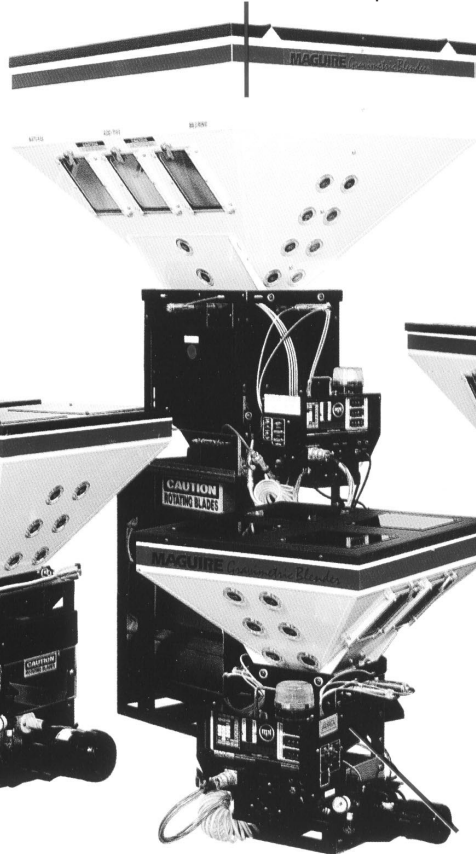
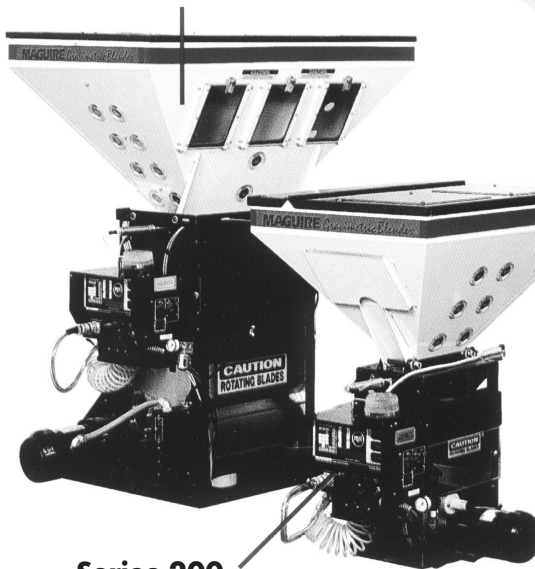
- 21 modes available
- 4400 lbs/hr • 2000 kg/hr
- Ideal for high output extruders and large central blending systems
- Two, four, or six compartment hoppers and up to six feeders

Series 900

- 21 modes available
- 2400 lbs/hr • 1100 kg/hr
- Designed for large extruders, blown film lines, and central blending applications
- Two, four, or six compartment hoppers and up to six feeders

Series 400

- 11 modes available
- 900 lbs/hr • 410 kg/hr
- For small to medium extruders, large injection machines, central blending, and 5 or 6 component systems
- Up to 8 components



Series 200

- 11 modes available
- 450 lbs/hr • 200 kg/hr
- For injection molders, small extruders, and central blending
- Up to 8 components

Series 100

- 5 modes available
- 165 lbs/hr • 75 kg/hr
- For injection molders and small extruders
- Up to 4 components



Micro-Blender

- 5 modes available
- 50 lbs/hr • 23 kg/hr
- Ideal for small injection machines
- Up to 4 components

Weigh Blenders (continued)



Gravimetric Blenders at (Low) Volumetric Prices

Maguire Products provides the most cost-effective weigh scale blenders available. In addition to very competitive pricing, they offer these advantages:

1. All Material Metered By Weight

- Accuracy is constantly monitored.
- No calibration is ever required.

2. Extreme Accuracy

- In actual operation, color and additive is held to within 1/10 of 1% of requested ratio.

3. Automatic Recalibration and Correction

- Any errors that may have occurred in the actual weights of any components added for a given batch are detected and compensated for on the next batch, assuring extreme accuracy of the process.

4. Direct Setting of Percentages; No Calculations

- For 20% REGRIND, set thumbwheel to "20%."
- For 4% COLOR, set thumbwheel to "4%."

5. Operation: Very Simply,

- Load hoppers with material: REGRIND, NATURAL, COLOR, ADDITIVE.
- Set thumbwheel switches for percentages desired.
- Turn the controller on.
- The unit now operates automatically, adding components in the proper percentages and maintaining the proper level of material in the mixing chamber.

How Maguire Weigh Scale Blenders Work:

All components are blended by weight based on the setting shown on the master controller. The blending is done in batches of 2,000, 4,000, 9,000 or 18,000 grams depending on model. Each component is dispensed separately into a single weighing chamber, and then all components are dropped together into a continuous mixing chamber. The entire unit is designed to mount directly over the feed throat of the process machine. Our unique weighing method allows the blenders to operate correctly in spite of vibration and shaking.

Dispense Sequence:

REGRIND is dispensed first according to the percent required. If no REGRIND or a limited amount is present, then the portions of NATURAL, COLOR, and ADDITIVE are increased to bring about a full batch weight.

NATURAL material is added second. This amount is calculated to leave exactly the right amount of room for the COLOR and ADDITIVE.

Once the NATURAL fill portion of the cycle has ended, the exact weight of the NATURAL that has actually dispensed is determined to detect even the smallest error.

Based on this actual weight of NATURAL material, COLOR is then metered into the mix to the ratio requested.

ADDITIVE is now added in the same way.

All components are then dumped into the continuously running mixing chamber.

Features:

Any errors that may have occurred in the actual weights of any components added for a given batch are detected and compensated for on the next batch. In this way, there is a continuous process of calibration and correction, assuring extreme accuracy of the process.

In actual operation, color and additive is held within 1/10 of 1% of requested ratio.

If there is not sufficient NATURAL, COLOR, or ADDITIVE materials to produce the required mix, then the process will stop and the ALARM will be activated. An insufficient quantity of REGRIND may also be programmed to sound an alarm and stop the process.

Data is continuously accumulated in a memory buffer to show the total weights of all components that have passed through the system. This data can be displayed upon request and cleared to zero at any time.

A computer may be added to monitor all weigh scale blenders in the plant, accumulating through-put data and generating reports at any time. Such reports show inventory usages for each shift, each day, each machine, each work order, and operator.

The system is modular in design. Both COLOR and ADDITIVE feeders can be added later or exchanged at any time for a larger feeder or LIQUID COLOR pump. The CONTROLLER is equipped with outlets so that all external devices plug into it. This allows controllers to be exchanged for updating of software or maintenance without downtime.

The weigh chamber, mix blades, and mix chamber slide out for cleaning, if necessary.

All dispense ports are visible through acrylic windows so that you may monitor the complete DISPENSE cycle visually. The mix chamber is also clearly visible through large acrylic windows.

Weigh Blender Accessories:

- Stands-Barrel, Gaylord, VTA
- Clear View Hoppers
- Magnet Drawer
- Software Upgrades

