



## INDUSTRIAL WEIGHT CONTROL SYSTEMS

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### BRC-623 BATCH AND RATE CONTROLLER

The BRC-623 Controller can be used to control virtually any feed device such as screw feeders, vibratory feeders, rotary valves, slide gates, and more.

An Allen Bradley PLC in conjunction with a digital scale indicator offer a robust platform to control a variety of batching and continuous feed applications. The BRC-623 can be used to dispense individual batches of product, or it can control the feed device to dispense a continuous flow of product at a preset rate.

As a Batch Controller, the BRC-623 uses an analog output or two speed discrete outputs to run your feeding device at a fast, or bulk fill speed. When the target weight approaches the BRC-623 will slow the feed device to a dribble speed to finish the batch with the highest possible accuracy.

#### Batching features include:

- Fast and Slow Speed Filling
- Preact and Auto Preact
- Automatic Determination and Optimization of the Fast and Slow Speed
- Automatic Jog to Bump Under Weight Batches up to the target weight
- Tolerance Checking and Alarming
- Batch Counters
- 2 Product Totalizers
- 200 point Batch History
- Rate Control During The Batch

As a Continuous Rate Controller, the BRC-623 will control the speed of your feeding device to maintain constant flow of product. With user selectable units you can select both your weight units as well as your time units (seconds, minutes, or hours).

#### Continuous features include:

- Automatic starting rate calibration
- Rate Tolerance Checking and Alarming
- PID Rate Control
- 2 Product Totalizers
- 200 point Rate History



In addition to the primary feed device, the BRC-623 can also control auxiliary equipment such as mixers, take away conveyors, refill equipment, and more.

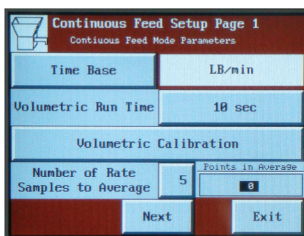
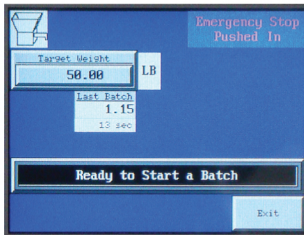
#### Additional features include:

- Refill low and high level monitoring
- Remote Communication
  - Using Hardwired Discrete or Analog Signals
  - Using Network Communication Options
- Manual jog control of the feed device
- Color Touch Screen Operator Interface



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Color Touch Screen interface provides easy to read menus and display of data.

#### Available Digital Inputs:

- Remote Start
- Remote Stop
- Refill Low Level Sensor
- Refill High Level Sensor
- Mixer / Take Away Device Monitoring

#### Available Digital Outputs:

- Enable Feed Device
- Enable Feeder Vibrator
- Refill Feed Device
- Alarm
- Batch Complete
- Batch in Process / Feeder Running
- Slow Speed (for 2 Speed Batching)
- Enable Mixer / Take Away Device

#### Available 4-20mA Analog Signals:

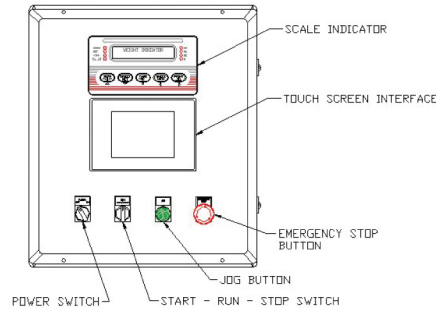
- Output for Feed Device Speed
- Output for current weight or rate
- Input for setting target weight or rate
- Input available for custom programming

#### Remote Communication Options:

- Allen Bradley TCP/IP Ethernet
- DNP3 over ethernet IP
- Modbus TCP
- DH485 over Serial
- DF1 over Serial
- Modbus RTU Master or Slave
- ASCII over Serial
- DeviceNet is available as an option

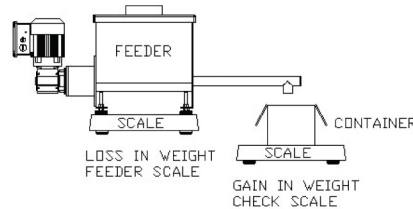
#### Additional Features:

- NEMA 4X indoor rating
- 120VAC 1PH control Power
- 10VDC loadcell excitation for powering up to (8) 350 Ω or (16) 700 Ω loadcells



In addition to the Color Touch Screen Operator Interface, mechanical switches for frequently used functions are also provided:

- 2 position power switch
- 3 position Start-Run-Stop selector switch
- Push button Jog switch
- Twist to release Emergency Stop push button



The BRC-623 was designed with flexibility in mind. This controller can be configured to operate as a loss in weight or as a gain in weight controller. It can operate virtually any feed device using the enable output and the analog speed setpoint. These two signals can be fed into a VFD or other device to control many types of equipment. The BRC-623 can control screw feeders, belt feeders, flexible screw conveyors, rotary valves, bucket elevators, vibratory feeders, slide gates, butterfly valves and more.

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