

BATTER SAVER

Batter Saver for Cake and Muffin lines

At BSI our focal point is to provide loss control weighing solutions that fit in to new and existing production lines.

Most conventional batter depositors operate in a very similar manner. The bulk batter is pumped to a holding hopper above the piston pump. Many depositors utilize multiple piston pumps. When the valve is not in position to deposit the pistons pull back filling the cylinders with batter. As the pans are fed beneath the depositor as a batter deposit is delivered into the pan. The operator adjusting the stroke of the pistons determines the amount of batter delivered per cycle. *The only manner of insuring that the correct amount of batter is being delivered is for the operator to periodically weigh an empty pan and pass it under the depositor. Then subtracting the empty weight from the full pan weight tells the operator if an adjustment is required.*

The Batter Saver eliminates operator scaling intervention by weighing every net deposit weight. The system uses the real time weight information to automatically send corrective adjustments as required to maintain the desired deposit weight every time.



The system pictured reduced process variation from 48 grams to 6 grams!

Batter Saver will automatically capture the empty weight of the pan. The next pan or row of cups is indexed forward for a deposit. After the deposit, the pan moves forward where the weight of the previous deposit is determined. In this manner the net weight of each deposit can be used to send a corrective adjustment to the servo motor controlling the pump stroke length.

Model BWS– 50

- Touch screen graphical user interface and control
- Food grade product contact surfaces
- Weigh through conveyor technology
- Heavy stainless steel tube support structure
- High precision wash down weigh cells
- Pneumatic pan indexer
- Servo Controlled Pump and Deposit Valve

SPECIFICATIONS:

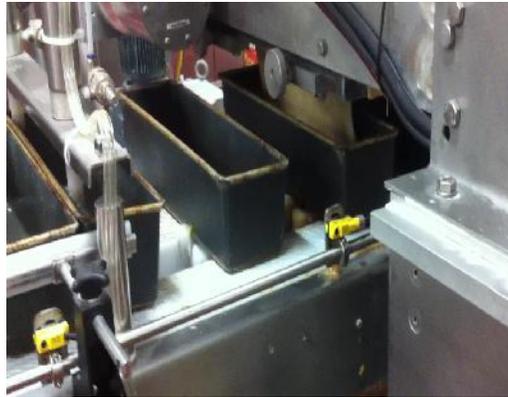
- Production speeds up to 50 deposits per minute
- Weighing resolution 0.1 gram
- Repeatability 0.5 gram
- System capacity 12 kilogram

BSI Bakery Systems, Inc.

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Batter Saver for Cake and Muffin Lines

The Batter Saver system provides weight based closed loop depositor control for cake and muffin production lines. The systems use weigh through conveyor technology. Automatic pan indexing presents the cake or muffin pan to each weigh station. After each pan or row of cups is filled, the pan is weighed providing the weight for the pan or each row of cups just filled. The average weight is then compared to the desired target weight and an adjustment signal is sent to the servo motor to increase or decrease the piston stroke length. The system constantly defeats upward and downward scaling trends caused by product density changes, by sampling the weight of each deposit.



Model BWS-50

Optional Hardware:

- Depositing heads
- Servo driven piston pumps
- Stainless steel holding tanks
- Up and down stream conveyors
- Desktop PC with check manager software.
- PLC based controller with discrete I/O, and communication modules
- Batter recirculation system

- Maintains the desired deposit of batter to each pan or row of pan cups.
- Provides easy networking for deposit weights storage for auditing and reporting purposes.
- Eliminates the need for operator monitoring and intervention.
- Eliminates empty pans from being sent to the oven because it senses whether batter was delivered during the last deposit.
- Stainless steel construction provides easy sanitation and flush-ability.
- Batter Saver is available in many different configurations and can be purchased as a retrofit of an existing depositor, or as a complete depositing system.

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