

BATTER SAVER

Batter Saver for Cake and Muffin lines by BSI

At Bakery Systems 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 tank. From the holding tank, the batter is pumped in a re-circulating path that travels through a depositor above a pan conveyor. As the pans are fed beneath the depositor one row at a time, the dose is delivered to each cup. The operator adjusting the pump speed or depositor head determines the amount of batter delivered per cycle. The duration of the deposit is limited by the conveyor speed.

The only manner of insuring that the correct amount of batter is being delivered is for the operator to periodically weigh an empty pan amount and pass it under the depositor.

- 1. The operator must then subtract the empty pan weight from the full pan weight.*
- 2. After the batter weight is determined, the operator must divide the batter weight by the number of pan cups to derive the average cup weight.*
- 3. After the average cup weight is determined, the operator will manually adjust the pump in the direction required to decrease the error between the desired cup weight and the average cup weight.*
- 4. Several minutes latter this process is repeated to determine the effectiveness of the operators last assessment.*



The Batter Saver eliminates operator intervention by weighing the pan as it is indexed under the depositor. Before each dosing occurs, the Batter Saver will automatically zero the weight of the pan. The next row of cups is then indexed forward for dosing. After dosing, the pan moves forward where the weight of the last dose is compared with the desired weight. The Batter Saver then automatically adjust the pump speed or the depositor fill time to deliver more or less batter during the next dosing, thus maintaining the desired weight per deposit.

Model BWS-130

- Touch screen graphical interface and control
- Food grade product contact surfaces
- Heavy stainless steel tube support structure
- High precision weigh cells
- Motorized walking beam pan indexer

SPECIFICATIONS:

- Production speeds up to 30 deposits per minute
- Weighing resolution 0.5 gram
- Repeatability 0.5 gram
- System capacity 12 kilogram

BSI Bakery Systems, Inc.

BATTER SAVER

Batter Saver for Cake and Muffin lines by BSI

The Batter Saver system provides weight based closed loop depositor control for cake and muffin production lines. The system uses walking beam technology to index the cake or muffin pan beneath the depositor. After each row of cups is filled the pan is weighed providing the average weight for the row of cups just filled. The average weight is then compared to the desired target weight and an adjustment signal is sent to the filler to correct an over or under weight condition. The system constantly defeats upward and downward scaling trends by sampling the weight of each deposit.



- Maintains the desired distribution of batter to each row of pan cups.
- 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 dose.
- Provides easy sanitation and flush-ability.
- The Batter Saver is available in many different configurations and can be purchased as a retrofit of an existing cake line.

Model BWS-130

Optional Hardware:

- Depositing heads
- 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

BSI Bakery
Systems,
Inc.