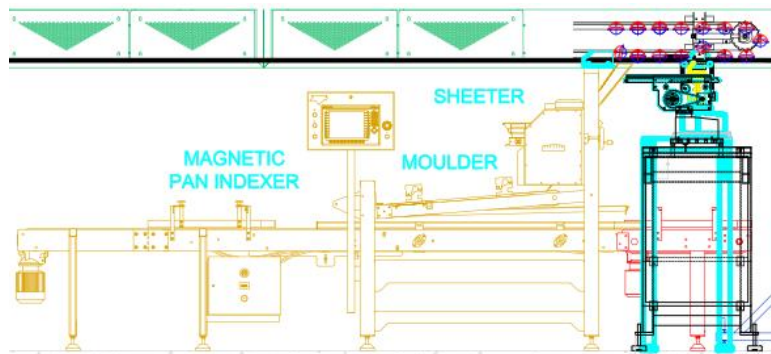


BUN SAVER IP

Divider Control Systems by BSI

Dough Saver & Validator Data Management "Check Manager"

The PC software allows a supervisor to add, edit or delete any of the Dough Saver's or Validator's product parameters and then transmit these changes to all of the controllers online. The Dough Savers & Validators also respond back to the PC with each loaf weight, label count, and other important information. Check Manager is a data collection system that provides easy to use statistical evaluation functions that allow you to determine your overall process variation, and the relationship of divider weight to wrap weight.



Hands-Free Divider Control

The Dough Saver eliminates the need for manual scaling and adjustment from the operator. Allowing the operator to perform other duties actually re-allocates labor costs associated with manual statistical sampling and adjustments. The first Dough Saver installation occurred in a small bakery in Maine. Where a very astute bakery owner knew that inconsistency in dough density required constant measurement and divider adjustment to maintain a consistent scaling. Prior to installing the Dough Saver, the Benier divider operator was required to weigh every dough piece cut by the divider on a static hand scale. The maximum production rate on this bread line was 20 cuts per minute. The owner determined that every three seconds this operator could...

1. Remove the next dough piece from the divider conveyor.
2. Place the dough piece on a static scale, and let the weight stabilize.
3. Determine if the weight was out of range over or under, if so, the dough piece would be thrown back into the divider hopper for rework
4. If the piece was within the upper and lower range place it back on the conveyor.
5. Remember the average weight of the last 5 dough pieces and determine if a scaling adjustment is required.

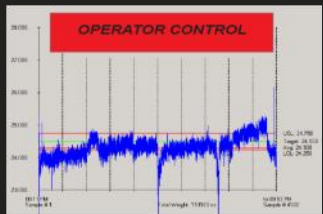
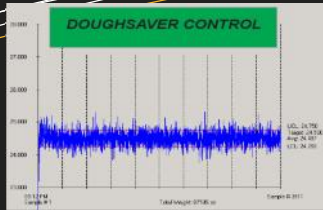
The reason Mr. Siegel purchased the Dough Saver was simple **"The operator could not keep up"**. The Dough Saver increased the plant yield by 8% the first year. He knew how to increase yield and control ingredient costs before the Dough Saver, **he only needed the right tool.**

...increased product yield by 7-8 percent by installing Dough Saver!

- Andrew Siegel—Bakery Owner, When Pigs Fly

The average package weight plus bake out loss equals the perfect divider weight for maximizing yield and reducing ingredient cost!

Start enjoying the benefits of more consistent scaling, less product waste, increased product yield, limited operator intervention and tighter process control.



Model HSBW-XL Optional Hardware:

- Servo control for multi-valve dividers with aggregate and Individual adjustments
- Desktop PC with check manager software
- PLC based controller with discreet I/O, and communication modules
- Stainless steel adjustable support structure with index in-feed conveyors
- Validator packaged product weigh system



BSI Bakery Systems, Inc.