

# CASE STUDY

See how we saved a customer \$169,539 annually!

## IN-MOTION CHECKWEIGHER

### BACKGROUND/PROBLEM

A customer from the Pacific Northwest processed ground beef via an extruder and automatic knife to cut the ground beef log into loaves. The loaves were put onto Styrofoam trays and sent to an overwrap machine. Upon exit the tray packs proceed to a weigh price labeler. The customer had an acceptable weight range of 1.00-1.05-lbs.

If the tray is within an acceptable weight range, it is labeled and then boxed. If the tray is not within the appropriate weight range, it will not be labeled. This unlabeled tray will be automatically rejected. Personnel must then manually take apart the packaging, discard it and put the meat back into the extruder. Due to the problematic equipment layout; the company had a tray **reject rate of over 20%!**

The distance between the weigh price labeler and extruder was approximately 100 packages. With such a large distance it would not work to have a feedback loop between the weigh price labeler and the extrusion conveyor. The customer was forced to accept whatever quantity of meat was put into the tray.

Lastly, the customer would raise passable weight range beyond 1.05-lbs that would **allow some trays to be overfilled**. This was especially true with tight deadlines. Reworking takes time, so the company would occasionally raise the upper weight limit to 1.10-lbs to ensure that fewer packages were rejected, **but they gave away a significant amount of product.**

The customer had losses associated with wasted packaging, excessive labor to rework overweight packages and product giveaway. **They were on the hunt for a better solution.**

*See Reverse for Solution*



## THE IMPLEMENTED SOLUTION

We placed an in-motion checkweigher directly after the extrusion machine. This allowed the customer to quickly eliminate loaves that were out of spec before they were even packaged, significantly reducing packaging waste.

The checkweigher also allowed the customer to maximize the efficiency of the extruder by providing feedback that made slight changes to the conveyor speed thereby altering the amount of meat in each tray. **The checkweigher could detect out-of-spec weight trends and adjust the conveyor speed automatically.** Also, since the checkweigher was much closer to the extruder, there was **far less loss in between adjustments.** The installed checkweigher was only about 7 packages away compared to the original 100.

## THE AMAZING RESULTS

After installing the checkweigher less than 2% of the packages were outside the weight range. **Reworks decreased by 95%!** The customer realized **annual projected package savings of \$67,539!** Note that this dollar figure does not include labor savings associated with not having to take the product out of the package.

In addition they adjusted their acceptable weight range to 1.00-1.04-lbs resulting in a **28% decrease in giveaway.** The average weight of each package went from 1.025 to 1.014-lbs. This seemingly small difference resulted in **\$102,000 of annual yield savings.**

The checkweigher **saved this customer \$169,539 dollars (not including labor savings) annually** and paid for itself in a matter of weeks. Contact us today to see how a checkweigher can benefit you.



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