

Straight to the Bottom Line- March 2012

By Steve Martin

Title- What's the most important machine on a dairy?

On every dairy every day, the most valuable product sold exits the dairy through a small stainless tube. Similarly, the dairy's largest cost item all passes through a hydraulic chute on what I will contend is the most important machine on the dairy; the feed mixer. With the high feed cost we have today, and the moderate milk prices we expect in the coming months, it might be a good time to put some extra thought into the machine and the process that handles the largest cost item on the operation. As we look at the mixer wagons and trucks that we work with every day, are we overlooking some issues that might compromise the way we handle this largest cost item?

I would suggest that the mixer that blends the ingredients is just as important as the computer nutrition model that developed the recipe. These mixers, though large machines, are filled with details that can make that recipe be successful. As well, the investment in people and machinery for the whole mixing process is quite large. We need to be sure we are managing that area of the dairy just as closely as we might focus on the milking parlor.

First off, are we managing the mixer and the labor in the most efficient way possible? We recently had a client that over time had over complicated the entire mixing logistics on the dairy. The result that finally got everyone's attention was the total work day hours of the feeders. They were coming in early and staying late every day just to get everything fed. None of this happened overnight either. The dairy had added a load here or there to accomplish special needs by specific groups of cows, included some different ingredients for a few pens to use up some inventory, added a mid-day top off load to help with bunk management, etc. The result was two very stressed out feeders who were driving all over the dairy with partially full loads in an unorganized fashion, burning diesel, tires and time. You can guess what the result of this was on employee morale and loading/feeding accuracy. After some efforts of one of our team members, these feeders are now happy again with an approximate one third reduction in total loads and an organized traffic pattern for the day.

We are generally in favor of splitting the herd and feeding multiple rations that coincide with the needs of the various stages of lactation, production and reproduction. However, we must send out nearly every mixer load full. Partial loads are a huge negative on efficiency. As well, smaller loads may be problematic as they often don't mix as well. When we look at feeder accuracy in the on-farm feed software programs, we find the largest errors in the smaller loads. This is a problem since these small loads are often used for close ups and fresh cows.

We often get asked our opinion on using premixes. This is a long running point of disagreement between many in the dairy industry. We generally favor premixes as they are a positive for feeder accuracy as well as overall efficiency. In general, putting lower feed rate ingredients into premixes allows for fewer partial loader buckets of those ingredients. It's only the last or partial bucket that has to be handled carefully to add the correct amount of that ingredient for each load of total mix. As well, every partial bucket means more time due to another trip back to the commodity bay.

Premixes are best for those ingredients with feed rates from 2 to 5 lbs per cow. Ingredients with 7 or more lbs per cow are probably best left as individual loading ingredients. To include these creates a

lactation premix that might end up with a 25 to 30 lb feed rate. This high volume is probably not needed and will add to total mixing time and cost. Just remember, anything added to a premix is mixed twice. So, be sure it is necessary from the partial loader bucket standpoint.

This month we are considering mostly logistical issues related to mixing feed on a dairy. These ideas are important as they can reduce the overall cost of mixing feed as well as improving the accuracy of the feed blending. In next month's column, we will look at ideas related to quality control of the feed mixing process. In many cases, a dairy handles more tons of ingredients daily than some commercial feed mills. Quality control in the mixing process is necessary to accomplish the final goal of managing feed cost and maximizing milk sales and cow health.