How to select the right milk filter to improve operation performance

Ron Bruggeman for Progressive Dairy

AT A GLANCE

Equipment size and farm situation are two factors to consider when selecting a milk filter.

In our previous article in the Feb. 7, 2019 issue of Progressive Dairyman, we discussed the history of milk filters and their importance in the milking process. Although considered just a necessary commodity by some, the milk filter is actually a tool that can help improve the overall performance of your milking operation. Given that there are several sizes, brands, fabrics and performance levels to choose from, how do you know which filter is the "right" tool for your specific operation? The correct choice is driven by two factors: equipment size and farm situation.

Proper filter selection starts with the obvious: selecting the size and shape that best fits your equipment. If the filter does not fit properly, its overall performance is compromised. But filter fit is not just about how well the filter fits the support; it is also how well the combination of filter and support fit in the housing.

A properly sized filter will allow milk to flow over its entire surface, maximizing the efficiency of flow. If the filter is touching the sides of the housing, the flow of milk through the filter is compromised as well as its ability to properly stop sediment. We see this most often in filters with narrower dimensions; it is not uncommon to have to crumple a filter a bit to get it to fit inside the housing. For these situations, choose a smaller-diameter filter support, which will allow milk to flow completely around the filter as intended. The smaller support will require a slightly smaller filter (dimension) to fully improve your process efficiency without compromising performance.

The next decision is tied to the farm's specific situation, driven by the weather in your location, farm size and bedding choice. All of these

factors combine to increase the risk of sediment getting into the milking system.

The number one contributor to risk for increased sediment in the milking process is wet conditions. No matter how strong your preparation process, water in the weather (rain, ice, snow) will impact sediment levels. All farms are subject to a "sediment season," and getting the cows clean enough before milking during this season is a challenge. The proper milk filter can handle the increase in sediment volume without slowing milk flow.

Farm size and bedding choice also impact filter performance. As farms grow, processes change to handle increased volume. More cows mean there is less prep time before milking, and that reduction in time can negatively impact sediment levels. Additionally, certain types of bedding, like sand, can dramatically increase sediment risk, particularly

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in wet weather. While we all appreciate the nice, clean conditions demonstrated in new milking equipment videos, we all know the reality is a bit different. Your filter selection needs to adapt to that reality.

Knowing which milk filter works best given equipment size and farm situation can

only come through experimentation. Too often, farmers allow their dealers to recommend and sell them whatever filter they have on hand. While that might be the best inventory management solution for the dealer, it may not be the best solution for the farm. There are a lot of milk filter choices in the marketplace. Before you simply opt for the one your dealer offers, experiment a little - try them all if you like - to determine which one reduces the sediment in your bulk tank and ensures milk flow efficiency throughout. The choice really does matter. 🍮

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