

# Industrial Washers May Promote Lower SCC and Decrease Mastitis in Dairies



By Haley Jorgensen

Three Wisconsin dairies recently installed on-premise Continental washer-extractors to properly clean the cloth towels used to prepare cow udders for milking. The dairies report that by thoroughly cleaning the towels, the new high-efficiency laundry equipment helps reduce cases of mastitis and may correlate to decreased bacterial and somatic cell counts (SCC) in milk. In return, dairies enjoy higher milk-processor incentives.

Milk processors evaluate milk quality based on the number of somatic cells, or white blood cells, present in milk, according to Dr. Mike Maroney, University of Wisconsin-Extension milk quality veterinarian. Dairies with low SCC, he says, not only produce more milk per cow than dairies with higher counts, they enjoy larger kickbacks, or premiums, from milk processors. "Quality premiums increase

the price the farmer is paid for their product," says Maroney. "Milk with lower SCC has been shown to yield more cheese."

## Reducing Cell Count; Increasing Premiums

Pond Hill Dairy, a 700-head operation in Ft. Atkinson, Wis., maintains an average SCC of 160,000, which generates premiums of up to \$10,000 per month, according to owner Keith Moritz. At Holsum Dairy in Hilbert, Wis., premiums are even larger. The 3,400-head operation produces cell counts as low as 175,000. This generates kickbacks of up to \$20,000 per month, according to veterinarian and owner Dr. Kenn Buelow. Such incentives provide a significant boost to any dairy's bottom line.

In order to qualify for such premiums, Moritz and Buelow turn out SCC well below the Food and Drug Administration (FDA) regulatory limit of 750,000 and Wisconsin's average SCC of around

300,000. They believe their Continental frontload washer-extractors may contribute to their success. The machines provide superior wash quality when compared to home-style toploads, according to Moritz and Buelow, so towels used for udder preparation get cleaner.

## Reducing Cases of Mastitis

"Having clean teats correlates directly with mammary health and low somatic cell counts," adds Buelow. He should know. The veterinarian spent 13 years making house calls to dairies throughout Minnesota, New Mexico, Colorado, Indiana and Texas, prior to establishing Holsum Dairy two years ago. Avoiding mastitis means dairies also avoid the vet fees and antibiotics required to treat the infection—a sum of \$100 to \$300 per case. The presence of subclinical mastitis in cows also results in lower milk production, according to Maroney.

## Proper Preparation Using Clean, Absorbent Towels

Proper preparation of the udder and teats is key to achieving lower SCC, according to Moritz and Buelow. It's also key to reducing cases of mastitis and the infection's resulting expense. And, they agree, using absorbent towels that have been properly cleaned helps ensure this success.

Dairy owner Dan Natzke milks 1,200 cows each day at Wayside Dairy in Wayside, Wis. He believes cloth is a better alternative to paper. "Paper towels cost too much because you use them once and throw them away," he says. "It's less expensive to wash and reuse cloth towels than it is to purchase and dispose of paper towels."

More importantly, Moritz, Buelow and Natzke believe cloth is a more effective way to prepare the udder, especially when the towels have been thoroughly cleaned.

## Cloth Requires Proper Cleaning

The only trick to using cloth, however, is ensuring it is properly cleaned after each use. That's why these dairy owners installed Continental Pro-Series washer-extractors. The soft-mount design of the



Wayside Dairy's, David Rivera, unloads the dairy's 55-pound capacity Continental washer-extractor.

frontload washer-extractors means they can be installed in existing spaces without need for new concrete foundations or bolting down. This is a huge advantage for dairies without much extra space, according to Fritz Baenen of OPL Services, a Continental distributor in Green Bay, Wis. Baenen recommended and installed each of the dairies' new washer-extractors.

### High Extract Speeds

The dairy owners wanted heavy-duty laundry equipment with high-extract capabilities. Continental Pro-Series washer-extractors reach extract speeds up to 387 G-force. As a result, more water is removed from each load, which not only reduces dry time, it can eliminate the need to dry towels altogether.

"A slightly damp towel with a hint of bleach is better at getting the stuff off udders that you can't see," maintains Moritz. But, for dairy owners who prefer to use dry towels, Continental's high extract can considerably shorten the time

a load takes in the dryer, and in turn, cut gas usage by up to 40 percent.

### Topload Washers Can't Handle the Load

Before tripling the size of his dairy two years ago—from 400 to 1,200 cows—Natzke used a topload washer to clean dairy towels. It took 80 minutes to wash and dry a load of 100 towels. Now, with the new 55-pound capacity Continental washer-extractor and 75-pound dryer, it takes half the time to complete a load triple that size. Plus, towels get cleaner, which can directly correlate to improved mammary health.

"On a dairy, there is too much dirt, sand and bedding for household washers," Natzke says. "They aren't strong enough. I wouldn't even consider a topload now. Larger dairies need a strong machine that can handle the load."

"A lot of dairies I work with use toploads," adds Buelow. "They aren't as durable as the Continental and they use more water and detergent."

### Chemical Injection, Programmability, Ease of Use

Designed for commercial and industrial applications, Continental washer-extractors offer programmability, durability, ease of use and chemical injection capabilities that save dairies money and time, according to Moritz, Natzke and Buelow. Once programmed, the machines automatically inject the appropriate amount of detergent and bleach at the correct water temperature and cycle. This ensures towels are thoroughly cleaned each time. The feature also eliminates chemical waste.

"You don't have the worry of over-application of chemicals and cost," says Buelow. As the owner of the largest of the three operations, Buelow says Holsum Dairy launders 9,000 towels daily. Yet, a 55-gallon barrel of detergent lasts 11 months and costs only \$700.

The automatic injection also saves operators a step in the laundry process. "Anything a machine can do that labor can do is money because it's

done so much more consistently," adds Moritz.

Since more than one person typically handles the laundry at most dairies, it's also critical the equipment be easy to use. "The learning curve to operate the machine is very quick," says Moritz of his 30-pound washer-extractor. "You just touch a button and go." This is important, he says, since most of his milkers are Hispanic and speak little English.

By carefully selecting laundry equipment to properly clean the cloth towels used to prepare cow udders for milking, Buelow, Moritz and Natzke are helping to reduce cases of mastitis and ensure the production of higher quality milk. At the same time, the dairies have cut water, gas and chemical usage and resulting costs. That's money in the bank.

"I'm really happy with the results we get from towels," says Buelow. "And I'm really happy with the reliability of the washer." ▀

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