



How clean is a clean?

Most detergents for milking plants seem to do a decent enough job. However, it might take a drum or two before milk soil accumulation or biofilms make themselves noticeable. But DeLaval detergents are specifically designed to clean DeLaval installations. And they are backed up by the technicians who service and fine-tune machine performance. Farmers are well aware that higher levels of bacteria lead to lower prices for their milk. With today's increasingly pressed margins, a lower price can wipe out any profit.

"But, if an installation has not been cleaned properly, you probably won't be able to see it," says Bruno Van Den Bossche, Manager Milk Quality and Animal Health at DeLaval. "This is because traces of minerals, fats and proteins build up in places you can't see. The consequence will be an increase in the bacteria count in the milk collected by the processor. Since they perform regular analyses of the

milk, they might be the first to know that you have a problem."
Difficult to pinpoint problem
 However, finding out what is wrong is not easy. It could be problems with udder health, aging liners, ineffective cooling tanks – or an installation that is not being cleaned well enough.

"But at DeLaval, we know our equipment inside-out, and we



Bruno Van Den Bossche

know our detergents 100%," says Bruno. "This means we don't have to compromise and can deliver good and effective cleaning without damaging any parts of the installation. For example, we perform compatibility tests to make sure there are no chemicals that will affect rubber parts like gaskets, liners or tubes. And then we stress test them."



DeLaval technicians know milking plants, so they will know where to look for residues.

Fine balance – effective but gentle
 "Competitive detergents might seem to do the job," Bruno continues, "but since we haven't been involved in formulating them, we can't be sure that they are either effective enough to do the job, or gentle enough not to damage anything. It's a fine balance."

Consistent – from ingredients to end product

All detergents are made by DeLaval from scratch, with full control over all the ingredients. "Not only do we know exactly what's in our products, but due to meticulous quality control the end products are extremely consistent, year after year," says David Engelen Factory Manager at the DeLaval plant in Drogen, Belgium. "We check all the raw materials when they arrive at the factory, analyze them and ensure they meet our quality requirements."



And then, after blending, we analyze the formulation to make sure it satisfies our specifications." A stringent follow-up procedure provides a final stamp of quality, David explains: "The small number of claims tells us that we are succeeding to produce detergents with an extremely high level of consistency."

Trouble-shooting cleaning problems

"Milking machines are complex systems," says Mario Lopez who heads the Global Technical Service Team at DeLaval in Kansas City, USA. Mario explains that cleaning is achieved through four causes: water temperature, cleaning time, mechanical action and chemical action (which is provided by the detergent). Effective cleaning is only obtained by finding the right balance between these four parameters.

"Take mechanical action," says Mario, "the water volume contributes to the mechanical action, but you also need air in the pipeline too. If you have too much water, you get no mechanical action, if you have too little, it will not reach all the surfaces. It takes considerable knowhow to get the balance right. A seller of detergent just won't understand all this, but our technicians know milking plants inside out. They will know where to look for residues. And what to do about them."

More bang for your buck

Bruno nods in agreement: "DeLaval detergents are sometimes perceived

as being less competitive price-wise. On a per litre basis that might be true, but if you look at the end result, i.e. the actual cleaning result, nobody can offer the same value thanks to the competence of our people. We like to say that our detergents contain a secret ingredient: the knowhow of our technicians – after all, who knows a DeLaval milking installation better than us?

"Selecting a detergent is not easy, since you cannot see if a plant is really clean. But if you switch to a competitive product tomorrow, you might have to wait until you've used up two drums before problems occur. The difference might not be visible to the eye, but it will become noticeable in the amount you get paid for your milk."

By Paul Jackson