



OZONE MOVES INTO THE DAIRY FARM

Ozone water treatment technology is earning a reputation as a remarkable effective, economical and environmentally friendly technique to create high quality water for the farm.

It is well documented that water quality is a key to cow health and milk production. The cows have a better feed conversion rate and show a significant increase in milk fats.

One ozone unit on the farm can disinfect the water, remove iron and manganese. The same unit can suppress mastitis causing bacteria, treat hooves/lameness and sanitize surfaces.

Ozone is a natural strong oxidizer, approved by the USDA, FDA and USDA Organic. It is made on site from air and a little electricity and reverts back to oxygen leaving no harmful by-products.

Novozone ozone systems are available for a broad spectrum of dairy applications:

TEAT WASH

Ozone dissolved in water can be used for a teat spray prior to milking to clean, sanitize, and disinfect the teats.

Ozone in water is not harsh and will improve teat health of the skin and teat, while offering the greatest sanitize available. This will reduce teat illness and mastitis, reduce bacteria in the milker, reduce cross contamination, and reduce the potential of disease on every cow.

Ozone use is lower cost than other options like antibiotics.



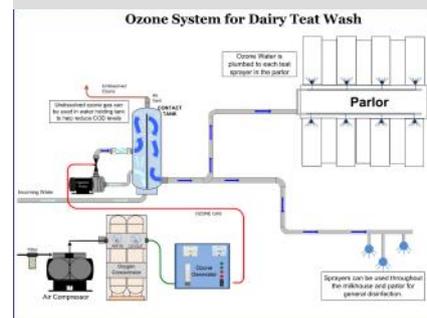
HOOF BATH

Hoof baths are used on many dairy's to treat cow's hoofs to prevent hairy hoof rot, and other common hoof diseases.

A cow's hoofs are commonly wet and in a bacteria laden environment that have the tendency to contract bacterial based diseases.

Ozone can be used in the water of a hoof bath to kill bacteria and prevent common hoof diseases.

Ozone is a powerful oxidant that can be used as an antimicrobial intervention. Ozone use is lower cost than other options, like copper sulfate, and formaldehyde.



WATER TREATMENT

Many dairies use bore water for all water use on the dairy. Bore water can contain contaminants such as Iron, Manganese, H₂S, and other taste and odour causing elements.

Ozone can be used for water treatment to oxidize these contaminants.





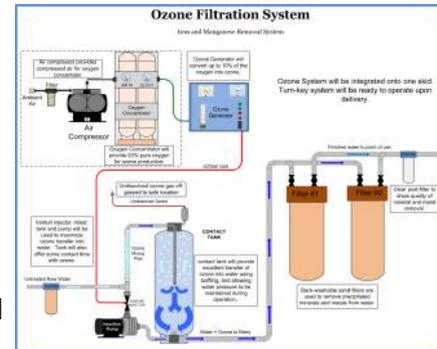
SURFACE SANITATION

Ozone is used for surface sanitation in many food and processing applications. These same benefits can be brought to a dairy.

If ozone water is used on your dairy this ozone should also be used for your cleaning process.

Water sprayed in the milking parlor and milk house for normal cleaning can be ozonized water to offer improved cleaning of surfaces and surface sanitation at **no** additional costs to the dairy.

By improving surface sanitation and eliminating bacteria in more places on your dairy herd health can be improved and milk quality can be assured.



BENEFITS OF OZONE

Ozone can improve water quality to your dairy. Cows will drink more water if it tastes better and looks better, cows that drink more water will eat more food, therefore produce more milk and are healthier animals overall.

Ozone can dramatically reduce mastitis as our American colleagues are demonstrating by washing 262,000 teats every day with ozone equipment.

Reducing bacteria in water will improve herd health and reduce maintenance on drinkers throughout your dairy. Using ozone as opposed to chlorine or H₂O₂ will save costs as there are no chemicals to purchase. Ozone equipment is a one-time purchase with only minimal maintenance costs.

There are environmental benefits as well, ozonized water is an alternative to using chemicals and antibiotics, there are no disinfection by-products. As the run-off water can be re-circulated, water consumption and concerns about discharge issues are reduced.

HOW IT WORKS

Ozone is dissolved into water that is sprayed throughout the dairy. Water for washing flows through an ozone injection system and is pumped throughout your facility no different that water without ozone.

Ozone is a powerful oxidant that kills all bacteria on contact. Ozone at a level of 2.0 ppm will achieve a 5 log reduction in bacteria in 3 seconds of contact time.

Ozone in water can be sprayed in the parlour on all surfaces, not just teat wash. Hands can be washed with ozonized water, milking machines can be sanitized, along with water sprayed into the machines to prevent cross-contamination from cow to cow, or groups to groups.

Using ozone as a standard part of surface sanitation will decrease cross contamination of illness and improve overall herd health.

To find out more about Novozone ozone water treatment systems for the dairy industry contact us at www.novozone.co.nz