

Choosing a wash routine- 4 most popular routines

- Routines which incorporate the use of more regular acid cleaning (C, D) are highly effective in maintaining low bacterial numbers on any size milking system; however this system is more suited to plants with automatic wash systems in place due to the extra safety precautions necessary with the use of acid
- Liquid products are more suitable than powder products where automatic cleaning is in place- no recycling with auto wash
- Cold wash systems (B, C) which may contain liquid or powder products require a higher working solution of sodium hydroxide and require increased contact time to be effective as they do not contain a sterilizer agent (chlorine).
- The advantages of using non-chlorine systems are that the possibilities of any chlorine residues are eliminated. However higher product usage rates are required and the use of hot water with more regular acid cleaning- advantages with night rate electricity

Routine A: Hot Detergent-steriliser cleaning

Detergent-steriliser (Sodium Hydroxide and Sodium Hypochlorite)

1. Wash outside of clusters, attach jettors and remove milk filter
 2. Rinse plant with 14 litres (3gls) of water per unit (cold or warm)
 3. Add **liquid detergent-steriliser** at the manufacturers recommended usage rate to hot water (65-75°C), allowing 9 litres (2gls) per unit
 4. Circulate the hot solution for 8-10 min, allowing first 5 litres to run to waste, the solution may be retained for the 2nd daily wash (if retained; discard solution after the second daily wash)
 5. **Rinse the plant immediately after the main wash cycle** with 14 litres (3gls) of cold water per unit
 6. Ensure the system is drained before the next milking
- **Once weekly:** After step 2, add an **acid descaler (milkstone remover)** at the manufacturers recommended usage rate to hot or cold water, allowing 9 litres (2gls) of water per unit
 - Circulate the solution for 8-10 min and discard
 - Rinse plant with 14 litres (3gls) of cold water per unit
 - Continue with steps 3, 4, 5 and 6
 - **Optional extra:** After step 5 is complete, Peracetic acid may be added as a sterilizer, at the manufacturer recommended usage rate to an additional rinse water cycle

Routine B: Cold cleaning

Detergent powder (sodium hydroxide, chlorine free)

1. Wash outside of clusters, attach jettors and remove milk filter
 2. Rinse plant with 14 litres (3gls) of cold water per unit
 3. Add the **detergent powder** at the manufacturer recommended usage rate to cold water, allowing 9 litres (2gls) per unit
 4. Circulate the solution for 8-10 min; allowing first 5 litres to run to waste. Solution may be retained for the second daily wash. **Leave the stain of the solution in the milking plant** until just before the next milking
 5. Just before the next milking, rinse with 14 litres (3gls) of cold water per unit
 6. Ensure the system is drained before milking
- **Once weekly:** After step 2, add an **Acid descaler** (milkstone remover) at the manufacturers recommended usage rate to hot water
 - Circulate the solution for 8-10 min and then discard
 - Rinse plant with 14 litres (3gls) of cold water per unit
 - Continue with steps 3, 4, 5 and 6
 - **Once weekly:** At step 3, add Sodium hypochlorite (chlorine) to the detergent powder solution at the manufacturer recommended rate in hot water (65-75°C). (A combined detergent-sterilizer product may be used as an alternative to using these two individual products). **Rinse the plant immediately after this wash cycle** with 14 litres (3gls) of cold water per unit
 - **Optional extra:** After step 5 is complete, Peracetic acid may be added as a sterilizer, at the manufacturer recommended usage rate to an additional rinse water cycle

Routine C: Non-chlorine cleaning
Detergent /acid cleaner
(Sodium hydroxide and phosphoric acid)

1. Wash jettors and outside of clusters and remove milk filter
 2. Rinse plant with 14 litres (3gls) of water per unit (cold or warm)
 3. After the morning milking, **add liquid detergent (non-chlorine)** at the manufacturer recommended usage rate to hot (65-75°C) or cold water, allowing 9 litres (2gls) per unit
 4. Circulate the solution for 8-10 min; allowing the first 5 litres to run to waste. When circulation is complete, discard the solution. Leave the stain of the solution in the milking plant until just before the next milking
 5. Just before the next milking, rinse with 14 litres (3gls) of cold water per unit
 6. Ensure the system is drained before milking
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- **After each evening** milking replace the liquid detergent (non-chlorine) product (Step 3) with a **Liquid Acidic cleaner** added at the manufacturer recommended usage rate to cold or hot water (65-75°C), allowing 9 litres (2gls) per unit
 - Circulate for 8-10 min; allowing the first 5 litres to run to waste and then discard.
 - Rinse immediately with 14 litres of cold water per unit

Routine D: Hot Detergent-steriliser/acid cleaning
(Sodium hydroxide-Sodium Hypochlorite and phosphoric/nitric acid)

1. Wash jettors and outside of clusters and remove milk filter
 2. Rinse plant with 14 litres (3gls) of water per unit (cold or warm)
 3. After the morning milking, **add liquid detergent-steriliser or powder product** containing sterilizer at the manufacturer recommended usage rate to hot water (65-75°C), allowing 9 litres (2gls) per unit
 4. Circulate the solution for 8-10 min, allowing the first 5 litres to run to waste, and discard when circulation is complete
 5. **Rinse the plant immediately** with 14 litres (3gls) per unit of cold water
 6. Ensure the system is drained before the next milking
- After each evening milking: (step 3), replace the detergent-sterilizer product with a **Liquid Acidic cleaner** at the manufacturer recommended usage rate to cold or hot water (65-75°C), allowing 9 litres (2gls) per unit
 - Circulate the solution for 8-10 min allowing the first 5 litres to run to waste and discard when circulation is complete
 - Continue with steps 5 & 6.