General Guidelines For Effective Dairy Equipment Cleaning

(For use with pipelines, bulk tanks and bucket units)
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Water Properties
- Hardness level should be less than 100 ppm (< 6 gpg)
- Iron levels should be less than 0.5 ppm
- Buffer levels should be less than 250 ppm
- Water must have 0 E. Coli and < 5 Total Coliform (potable)

Before Milking
1. Pre-sanitize (liquid chlorine)
   - Sanitize with water less than 60°C (140°F)
   - Chlorine concentration should be 100 - 200 ppm
   - Sanitizing must be done within 20 minutes of milking
   - Allow sufficient time for complete drainage

After Milking
2. Pre-rinse (water only)
   - Starting temperature of 49 - 60°C (120 - 140°F)
   - Ending temperature of 43°C (110°F) or greater
   - Divert milky water and discard
   - Ensure complete drainage and 95 per cent or more solids removed
   - If you are having difficulty maintaining hot water temperature during the hot wash cycle, increase the pre-rinse temperature to warm the equipment to a maximum of 60°C (140°F)

3. Wash (chlorinated alkaline powder or liquid)
   - Starting temperature of 74 – 82°C (165 - 180°F)
   - Ending temperature of 43°C (110°F) or greater
   - For pipelines and bulk tank, 5 - 8 minutes duration depending on size of system
   - Solution pH of 11.5-13.0
   - Active chlorine 100 – 125 ppm
   - Active alkalinity of 300 - 800 ppm

4. Acid rinse (food-grade liquid acid)
   - Use water temperature indicated on label
   - Solution pH 3 - 3.5

* With manually cleaned buckets or bulk tanks, use cleaning compounds designed for manual washing and follow label directions. These guidelines do not apply to robotic milking systems.

These are general guidelines only. A complete wash analysis should be performed by your equipment dealer or DFO Udder Health Specialist to ensure optimum cleaning.