



Cleaning and Disinfection of Equipment

In order to make cleaning as efficient as possible, there are five important parameters to be considered:



1) Mechanical/Physical Action

In circulation cleaners, this is usually achieved by turbulent flow such that the liquid has a scrubbing effect on surfaces.

In spray applications, the kinetic energy of the spray flow will also give a scrubbing effect. Sometimes old fashioned physical scrubbing to the exterior of the clusters is required.



2) Heat

Aids the break-up of fatty soils and if the temperature is sufficiently high, it will also aid in the destruction of micro-organisms.

Heat is useful to break-up proteins, but care is needed, if the temperature is too high, protein will simply burn on to surfaces and become more difficult to remove. The result will not only be a harbourage for micro-organisms, it could also directly result in milk contamination if burnt on debris has flaked off surfaces into subsequent milkings.



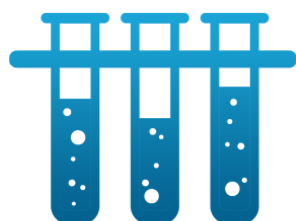
3) Contact Time

Eventually, you might clean with just hot water, but a very long contact time would be needed, plus a lot of expensive thermal energy. Using detergents at the right strength and temperature will reduce contact time.



4) Potable Water

You cannot clean with dirty water. If the water is not fit to drink, it is not fit to clean with.



5) Chemicals (Detergents and Disinfectants)

Choosing the right chemical is essential, you cannot clean with a disinfectant, and you cannot disinfect with a detergent.