Cleaning and Disinfection



3. Cleaning Tank and Other Equipments

6-3. Cleaning Tank and Other Equipments

The mixing tank for cleaning agents should be made of polypropylene or FRP which is resistant to pH in the range of 1 to 12. The cleaning agents work better at an elevated temperature. (e.g. $35-40~^{\circ}$ C). The cleaning temperature should not be below 15 $^{\circ}$ C at which the cleaning rate is very slow. Cooling may also be required to avoid overheating. So the heating and cooling equipments may be necessary to control the temperature of the cleaning solution.

The size of the tank needs to be large enough to contain the volume of the cleaning solution approximately equal to the volume of the pressure vessel plus the volume of the feed and return pipes. If it is difficult to calculate the exact volume of the pipes, it can be assumed to be about 20 % of the vessel volume. Appropriate pump, valves, flow meters, and pressure gauge should be installed to control the flow.