

Cold WFI distribution

A particular challenge in cold WFI production is storage and distribution. For cold-operated systems, additional measures must be taken to prevent and kill microorganisms.

One possible measure is the ozonization of the tank and the distribution system including the ring line. Another stand-alone or combined measure is sanitization for hot water, pressurized hot water or even pure steam.

The use of ultrafiltration is also possible with our CWFI system as an additional safety measure.



Technical Data

Material	Stainless steel 1.4404 or 1.4435, roughness <math><0.8 \mu\text{m}</math> (optionally <math><0.6 \mu\text{m}</math> and e-polished)
Storage container volume	100 - 50.000 l
Pressure resistance	-0,49/0,49 bar or -1/3 bar
Pump(s) Distribution system	hygienic distribution pumps, optionally redundant
Sanitization Storage and distribution system	by hot water, optionally pressurized hot water, sterile steam or ozone
Separation of endotoxins and microorganisms	optionally via ultrafiltration in the bypass to the tank
Tap management	various concepts can be implemented
Tap cooling/heating	automated via subloop with cooler or heater
Material distribution system	Stainless steel 1.4404 or 1.4435, roughness <math><0.8 \mu\text{m}</math> (optionally <math><0.6 \mu\text{m}</math> and e-polished)
Connections	Aseptic clamp in accordance with DIN 11864-3 A
Valves	Diaphragm valves (optional T-valves)
Inline/ online process monitoring	Level, TOC, conductivity, flow rate, temperature and pressure (optional bacterial count determination), ozone
Control and visualization	System control via Simatic S7 PLC, Operation and visualization via Siemens TIA Portal (19" touch panel)
Computer validation	according to GAMP 5

Technical changes and errors excepted.