



High Hygiene Tank

Intermediate buffer tank



Highlights

- Handles a wide range of products
- Enables simple, flexible production
- Maintains consistent high product quality
- Maintains food safety with sterile air

Enabling flexibility and quality

Our high hygiene tank maintains consistent high product quality with a separate inlet and outlet to eliminate product recirculation and gentle agitation that protects particle integrity and ensures even distribution. The optional slow paddle-type agitator enables it to handle a wide range of products – from low to high viscous, smooth to particulate products. Sterile air flows constantly through the system to prevent contamination and maintain food safety. The unit is simplified for on-site installation and enables flexible production by handling differences in capacity between the pasteurizer and filler.

Application

The high hygiene tank is an intermediate buffer tank between a pasteuriser and a filling machine that evens out capacity differences.

Working principle

First, the tank is sanitized with steam introduced from the end valve cluster backwards through the filling pipe into the tank. The steam exits through the air vent and after sanitation sterile air evacuates the remaining steam and slowly cools the tank down.

Next, the product enters the tank through a separate inlet and exits through a separate outlet, ensuring turnover and preventing recirculation. During operation, sterile air flows over the product surface preventing microorganisms from entering.

The tank is cleaned in place (CIP) with an external CIP station. The internal CIP nozzles ensure efficient cleaning.

Basic Unit

The unit is an atmospheric vessel (no overpressure allowed) and stands on four legs. Components are pre-assembled and a line-end valve cluster comes as a separate sub-unit.

Main components

- Tank body in 316 l stainless steel
- Manhole with safety switch
- Air vent breathing protection
- Valves for product and media

- CIP nozzles
- Sterile air filter system
- Paddle agitator (optional)

Capacity

- 2000 l (1500 l working volume)
- 3000 l (2500 l working volume)

Technical data

Connections

- Product inlet SMS 63,5
- Product outlet SMS 76
- Outlet valve SMS 51 or 63,5
- Steam inlet DN 20
- Sanitary air SMS 25

Consumption data

- Rated power 1.5 kW (Option 1)
- Supply voltage 3-phase 380-440 V / 50-60 Hz
- Steam sterilization ~50 kg / sterilization cycle, 30 min
- Steam barrier agitator 12 kg/h
- Sanitary air 9 Nm³/h

Layout

