Pasteurised Milk Storage Tank Catalogue

Hygienic stainless-steel storage solutions for chilled pasteurised milk handling, buffering, and transfer.



Product Overview

These pasteurised milk storage tanks are designed for dairy plants that require hygienic holding, stable chilled storage, gentle agitation, and easy clean-in-place operation. Typical dairy storage tanks use stainless-steel wetted surfaces, insulation, temperature monitoring, and complete drainage to protect product quality between pasteurisation and filling or further processing. Storage tanks are commonly used as intermediate or finished-product holding tanks in dairy processing, with stainless-steel inner surfaces, insulation, jacket options, and controlled drainage depending on the application.

Catalogue Models

Model	Capacity	Recommended Use	Description
PMST-500	500 L	Small dairy, pilot plant, batch holding	Compact insulated vertical tank with hygienic outlet, sampling valve, lid/manway, and CIP spray ball connection.
PMST-1000	1,000 L	Milk collection centre or small pasteurisation line	Food-grade stainless-steel storage tank with slow-speed agitator, sloped bottom, level indication, and chilled holding capability.

PMST-3000	3,000 L	Medium dairy processing and filling buffer	Insulated storage vessel with sanitary inlet/outlet manifold, temperature probe, CIP return, air vent, and bottom drain.
PMST-5000	5,000 L	Industrial pasteurised milk holding before packaging	High-capacity tank with robust support legs, optional cooling jacket, integrated cleaning coverage, hygienic valves, and process control readiness.
PMST-10000+	10,000 L and above	Large dairy plant, central buffer storage, dispatch preparation	Custom vertical or horizontal tank with access ladder, platform options, multiple inlet/outlet ports, automated valve manifold, and plant-wide CIP integration.

Standard Tank Description

- **Material:** Food-grade SS304 stainless steel as standard; SS316L optional for aggressive cleaning regimes or special plant requirements.
- **Construction:** Vertical or horizontal insulated design with polished internal surfaces to support hygienic cleaning and reduced residue build-up.
- **Insulation:** Polyurethane foam or mineral wool insulation to maintain chilled product temperature and reduce energy loss. Milk storage tanks are commonly specified with AISI 304 or AISI 316 stainless steel, polished internal surfaces, polyurethane or rock-wool insulation, and accessories such as digital thermometer, level indicator, sampling valve, air vent, and manhole cover.
- **Agitation:** Slow-speed sanitary agitator to maintain milk homogeneity without excessive foaming or product damage.
- **Drainage:** Sloped or conical bottom for full product drainage and reduced dead zones.
- **Cleaning:** CIP spray ball or rotary cleaning device for internal wash coverage without manual entry.

Piping and Valve Arrangement

Connection / Line	Purpose	Typical Components
Milk inlet line	Receives pasteurised milk from pasteuriser or balance tank.	Sanitary pipework, hygienic butterfly valve, non-return valve, flowmeter option.
Milk outlet line	Transfers chilled pasteurised milk to filling, packaging, or process use.	Bottom outlet, hygienic pump, butterfly valve, pressure gauge, sampling point.
CIP supply line	Feeds cleaning solution to spray ball for internal tank cleaning.	CIP valve, spray ball, pressure/flow verification point, return interlock option.
CIP return / drain line	Returns cleaning solution and rinse water to CIP skid or drain.	Bottom drain, sanitary valve, drain trap, conductivity/temperature monitoring option.
Vent / air filter	Allows safe pressure equalisation while reducing contamination risk.	Sanitary vent, sterile air filter option, vacuum/pressure relief valve.

Utility jacket line	Optional chilled water/glycol circulation for temperature control.	Jacket inlet/outlet, control valve, temperature controller, insulation cladding.

Technical Specification Guide

Parameter	Standard Offering	Optional Upgrade
Capacity range	500 L to 10,000 L	Custom capacity above 10,000 L
Tank orientation	Vertical	Horizontal or silo configuration
Material	SS304 stainless steel	SS316L stainless steel
Internal finish	Polished hygienic finish	Mirror polish/passivated finish
Temperature holding	Insulated chilled storage	Cooling jacket with glycol/chilled-water circulation
Cleaning	CIP spray ball	Rotary jet cleaner or automated CIP valve matrix
Instrumentation	Temperature indicator, level indicator, sample valve	Load cells, PLC integration, data logging, alarms

Recommended Accessories

- Sanitary centrifugal product pump with variable speed control.
- Automated valve manifold for product transfer and CIP routing.
- Inline temperature transmitter and high/low temperature alarm.
- Level transmitter, sight glass, or load-cell weighing system.
- Access ladder and service platform for larger tanks.
- Hygienic sampling valve for quality checks.
- Sterile vent filter and pressure/vacuum relief protection.
- Bottom drain valve with drainability-focused installation.

Application Notes

For pasteurised milk service, the tank should be installed in a hygienic area with segregated raw and treated product routes, drainable pipework, validated CIP coverage, and reliable chilled-water or glycol utilities where active cooling is required. Dairy plant design guidance commonly emphasises sanitary stainless piping, CIP circuits, refrigeration continuity, hygienic zoning, and drainable pipework as core requirements for safe milk handling. Dairy plant designs typically coordinate sanitary piping, CIP circuits, refrigeration, hygienic zoning, and drainability within the process layout.