

MILK JUG

REFRIGERATED MILK STORAGE TANK



Until now, the only solution for cooling milk for special calf feeding needs was to install a large bulk cooler or inefficiently recirculate cold water around a tank. Either too large, lack of self-cleaning (CIP) or inefficiency has kept many farmers from pursuing the feeding of whole or pasteurized whole milk.

The Milk Jug and Double Milk Jug are designed to have a small footprint; efficiently cool milk with refrigeration (+5.0C); offer a self-cleaning system that will assure a clean vessel to cool and store your milk; and offer diagnostic data for monitoring the cooling and cleaning cycles.

What is the Milk Jug?

The CIP (Clean in Place) washing system is designed to be quick and efficient, minimizing downtime when in operation. In as little as 10 minutes, the Milk Jug can be completely clean and ready to fill with the next batch of pre-chilled (60°F - 65°F) pasteurized milk.

When using HTST (Flash) milk pasteurizing systems, a raw milk holding tank is required. The Milk Jug is a good solution providing refrigerated cooling and CIP washing.

The Milk Jug fits nearly anywhere and can be easily located next to the pasteurizing system. If storage is needed after pasteurization, the Milk Jug can easily accomplish this.

In applications where there is a chiller that pre-cools the milk to 36°F, the Milk Jug can be ordered without cooling to maintain the milk temperature in its well-insulated, double-walled tank. This non-refrigerated Milk Jug can be ordered with the CIP washing system or, if your pasteurizer allows, can be easily hooked in series with it for auto CIP.

Connecting the Milk Jug is extremely simple, only requiring a standard 20A, 220 VAC plug, cold and hot water and bulk washing detergent.

Features:

- Insulated to store waste milk before or after pasteurization.
- Chills and stores raw milk prior to pasteurization, greatly reducing bacteria growth compared to water cooled tanks.
- Designed to hold chilled pasteurized whole milk (38° - 40°) for the HL 100 or other automatic calf feeding systems.
- Space saving design: 34" x 34" footprint.
- One-step CIP system; 10 minute wash cycle.
- Automatic Empty Shutoff

Models/Sizes:

- Small footprint on all sides (34" x 34") to fit through a standard 36" door, making it very versatile for most settings.
- MJ 50 - 50 gallon unit 34" x 34" x 60"
- MJ 100 - 100 gallon unit 34" x 34" x 62"
- MJ 200 - 200 gallon unit 34" x 34" x 83"

Milk Jug Technical Specifications:

Designed for use with pre-chilled milk (65°F)

Power: 220 VAC, 20 AMP

Water Supply: Cold and Hot water

Drain: Floor drain needed for wash and rinse water

Compressor: 3/4 HP

CIP: Single-step wash cycle; approx. 10 minutes

Wash Motor: 1/4 HP, 220 VAC

Cooling: 35°F Evaporator, 7720 BTU/ Hour

Refrigerant: 134A

DOUBLE MILK JUG



The Double Milk Jug is an extension of the original Milk Jug that has been specifically designed for the HL 100 and other automatic calf feeding systems. Its patented design offers the ability to always have fresh milk to supply the auto feeders. Its dual-tank design automatically senses when one tank is empty and switches to the other tank to assure non-interrupted product for feeding calves.

It offers various options for filling the tanks; removable cover for bucket filling; connection to automatic pasteurizing systems; robotic milking machines and milking parlors.

During filling from pasteurizers, robotic milking and traditional milking systems, the Double Milk Jug will sense when one tank is full, and automatically switch the second tank, assuring that all milk is collected efficiently and automatically.

The Double Milk Jug's output features allow it to sense when one tank becomes empty, automatically switching the valves to the other full tank, making sure that the flow of milk to the automatic calf feeder is never interrupted.

Cooling the dual milk tanks is efficiently carried out by utilizing one refrigeration compressor to control the cooling of both tanks. This single refrigeration system design is to allow an affordable solution for supplying an uninterrupted supply of cooled milk (+5C) 24 hours and day, 7 days a week.

Features:

- All Stainless Steel construction.
- Extra thick milk tank insulation.
- Easy installation; hot and cold water; power; air supply; drain.
- Small size (footprint) easily fits in calf feeding barns.
- Quickly cools milk to storage temperature to reduce bacteria buildup.
- Adjustable setpoint (cooling) temperature, then maintains that temperature.
- Refrigerated cooling by a single refrigeration system.
- Auto-Fill; Ability to automatically switch tanks when one becomes full.
- Auto-Empty; Automatically switches to full tank when one is emptied.
- Fully adjustable Auto Washing system of each tank becomes empty, making it ready to be filled again.
- Adjustable chemical concentrations for wash system.
- Digital control that displays current milk temperature and amount of milk and status of each tank.
- Digital tracking of both tanks including; incoming milk temperatures, milk cool-down and storage temperatures, and washing cycles.
- Automatic adjustable milk agitation.
- Complete maintenance functions built into the system to aid in diagnosing and testing of components.

And many more.....

Double Milk Jug Technical Specifications:

Designed for use with pre-chilled milk (65°F)

Double 100 Size: 64" L x 61"H x 33" D

Power: 220 VAC, 20 AMP

Water Supply: Cold and Hot water

Drain: Floor drain needed for wash and rinse water

Compressor: 2 HP

CIP: Single-step wash cycle; approx. 10 minutes

Wash Motor: 1/4 HP, 220 VAC

Cooling: 35°F Evaporator, 15,000 BTU/ Hour

Refrigerant: 507

Optional add ons include:

- **Geo-thermal heating**
- **Pre-cooler**
- **Automatic Switching for single Milk Jugs** (Standard on the Double Milk Jug)
- **Pump out Kit**

Components:



1/4 HP Wash Pump



Interior Agitator



Drain Valve



CALF FEEDING SOLUTIONS

Custom made for your farming needs!



Calf-Star LLC

4324 N. Cty Rd. P.

New Franken, WI 54229

(920) 680-5976 fax: (920) 866-9819

info@calfstar.com

www.calfstar.com