Tunnel-Type Milk Crate Washing Machine

Automated, high-throughput cleaning for reusable dairy crates



Illustrative configuration shown; final machine layout is tailored to the application.

Product Overview

Designed for continuous, hygienic cleaning of reusable plastic crates, the tunnel-type washer carries each crate through controlled spray stages for repeatable results. It is suitable for dairies, beverage plants, food-processing facilities, crate pooling operations and distribution centres. Capacity, crate envelope, heating method and utilities are engineered to suit each site.

Key Benefits

- **High-throughput operation:** continuous conveyor handling supports demanding production schedules.
- **Consistent wash coverage:** multi-directional spray manifolds target internal and external crate surfaces.
- **Hygienic design:** stainless-steel wash-zone construction supports routine sanitation.
- **Lower manual handling:** automated transport reduces repetitive loading between wash stages.
- **Water-saving options:** recirculation, filtration and staged rinsing can reduce fresh-water demand.
- **Flexible integration:** infeed, outfeed and controls can be matched to upstream and downstream equipment.

Typical Washing Process

1. **Infeed:** crates are placed onto the conveyor manually or by an upstream system.
2. **Pre-wash:** recirculated water removes loose soil and product residue.
3. **Main wash:** heated water and an appropriate cleaning agent are applied through high-coverage spray manifolds.
4. **Final rinse:** cleaner water removes detergent and remaining debris.
5. **Drain or dry:** water drains naturally or is reduced with an optional air-knife section.
6. **Outfeed:** cleaned crates proceed to inspection, stacking or production reuse.



Illustrative view of multi-directional spray coverage inside the wash tunnel.

Indicative Technical Specification

Parameter	Typical Configuration
Machine type	Continuous tunnel washer
Suitable products	Reusable plastic milk, dairy and beverage crates
Throughput	Selected to suit the required crates per hour
Crate dimensions	Configured to customer-provided minimum and maximum sizes
Wash stages	Pre-wash, main wash and final rinse; additional stages optional
Heating	Electric, steam or external hot-water supply, subject to design
Construction	Stainless-steel wash-zone construction; grade to be confirmed
Conveyor	Variable-speed system selected for crate geometry and capacity
Controls	Operating, temperature and safety controls
Utilities	Electrical power, water, drainage and heating service as applicable

Standard & Optional Features

- Enclosed tunnel with splash containment
- Multi-directional stainless-steel spray manifolds
- Recirculation tanks with removable filtration screens
- Variable-speed conveyor operation
- Accessible inspection and maintenance points
- Optional detergent dosing and concentration monitoring
- Optional fresh-water final rinse
- Optional air-knife drying or blow-off section
- Optional heat recovery, solids separation and line integration

Applications

Ideal for milk-processing plants, dairies, beverage operations, food factories, cold-chain facilities, crate pooling operations and distribution centres requiring dependable cleaning of returnable plastic crates.

Information Required for a Quotation

- Crate photographs, drawings and dimensions
- Required throughput in crates per hour
- Type and level of contamination
- Required wash and rinse temperatures
- Available electrical, steam, hot-water and drainage services
- Preferred loading height and conveyor direction
- Site space and production-line integration requirements
- Applicable hygiene, safety and documentation standards

Request a tailored proposal: Share your crate details, target capacity and utility information to receive a machine configuration and commercial quotation suited to your operation.