

# Minimise your water and energy usage with a Unitech Washer

## Project:

To custom design and manufacture a Unitech twin track crate washer with pre-wash, detergent wash, final rinse, sanitising rinse and air knife drying system for our client Technica International of Lebanon to supply to the end user in Dubai, UAE.

Unitech Washers completed a twin track crate washer and dryer for our client Technica International. The washer was designed and manufactured complete with pre-wash, wash, rinse and sanitize sections along with 4 off multi pass air knife blowers and extraction fans. The crate washer will wash and dry up to 5,000 crates per hour.

The combined process of sustained 360° jetting at a pressure of 60 psi and the re-circulation of the water at each stage via a simple drawer filter system makes Unitech’s washers effective at reducing water and power usage. All Unitech washers are of a hygienic design making them suitable for use in the food and beverage industry. The tracks within the machine are driven using a single strand chemical resistant chain well proven in the food and logistics industries.

## Process:

- **Pre-wash:** 360° sustained ambient water jetting. Water is recirculated.
- **Detergent wash:** multiple manifolds fitted with strategically positioned stainless steel quick release fan spray jets, jet the remaining soils from the crates using re-circulated hot (50-80°C) detergent solution which is then re-circulated.
- **Rinse:** hot water is jetted onto crates to remove detergent and is then re-circulated.
- **Sanitising rinse:** a 360° jetting manifold is positioned around the crates to allow rinse aid / sanitising solution to be applied to the trays prior to drying. The water from this section drains to the final rinse as make-up water to reduce water usage.
- **Air Knife:** Multiple blowers connected to air knives blow excess water from the crates as they pass. The air is recirculated and achieves a temperature of around 30°C through friction in the pipes and blower housing.

## Features:

- 304 grade stainless steel sub-frame
- 304 grade stainless steel tanks and canopies
- Stainless steel shafts and sprockets
- Adjustable feet with rubberised load pads
- Canopy access doors fully interlocked along length
- Quick release nozzles for easy cleaning



Built at our Brownhills site, the washer, which is 13.5 meters in length, took approximately 20 weeks to build and was designed to wash and dry crates soiled by dairy returns. During their visit to our site to inspect the machine, our client requested further adaptations to meet new requirements from the end user, which Unitech were able to do before shipping the machine in 2 containers to the Middle East.

Visit our website to see our range of washers or to discuss a project, please contact your local Unitech representative or contact our office on the number below.

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