Specialty Chemical Manufacturer Saves $30,000 per Month with New Tote Cleaning System

Problem:

A manufacturer of specialty chemicals needed to thoroughly clean the interior surfaces of 4’ x 4’ (1.2 m x 1.2 m) stainless steel shipping totes before reuse. The totes, used to ship polymer solutions around the world, were allowed to air dry after use. The totes sometimes sat empty for months or even years before washing, resulting in difficult-to-remove, baked-on residues.

The manufacturer used a turbine-driven rotating nozzle spraying 10 gpm (37.8 l/min) of hot (160°F/71.1°C) water at 100 psi (6.9 bar). Wash cycles were long – up to 45 minutes and were often repeated for complete residue removal. The manufacturer ultimately hired a third-party contractor to clean many of the totes since the turbine-driven nozzle could not provide consistent, effective cleaning.

Solution:

Spraying Systems Co. installed a TankJet® AA190AGH and an AutoJet® Fluid Delivery System to clean the totes. The TankJet unit is lightweight, is easily installed and removed from the totes and provides powerful, high-impact cleaning of all interior surfaces. Hot water, provided by the customer, is pumped to the tank cleaner by an AutoJet Fluid Delivery System at 500 psi (34 bar) and a flow rate of 20 gpm (75.7 l/min). Operating at greater flow rates and higher pressures increases cleaning impact and results in cycle times of just 10 minutes – even for extremely difficult-to-remove residues.
Specialty Chemical Manufacturer Saves $30,000 per Month with New Tote Cleaning System – Continued

Results:

Use of the TankJet® tank cleaner and the AutoJet® Fluid Delivery System have reduced cleaning time for totes by more than 75% and cleaning consistency has greatly improved. In addition, all totes are now cleaned in-house, for a monthly savings of US$30,000 previously paid to a third-party cleaning contractor. The total system cost was recouped in less than one month.

A CLOSER LOOK AT THE SYSTEM

The TankJet AA190AGH is a high-impact tank cleaner that provides 360° coverage of tanks and totes up to 34’ (10.4 m) in dia.

TankJet AA190AGH tank cleaner
- Versatile high-impact tank cleaner provides efficient, consistent, reliable cleaning with virtually no maintenance
- Air motor is positioned outside the tote, away from cleaning action
- Lightweight unit can easily be moved from tank to tank