



World Class Cleaning Solutions

CASE STUDY

Manufacturer: Electrical Power Assemblies

Customer Details:

Product: AquaVantage® 3800 GD

Parts Cleaned: Wide variety of parts of different shapes, mostly stainless steel.

Removing What Soil(s): Corrosion inhibitor oil, machining particulate, ambient soils, fingerprint.

Why are parts degraded: Cleaning of parts received from suppliers prior to final assembly.

Washing system:

Custom-built ITS spray wash tunnel system. Two different tunnels, each ~5m (16') long, with 3m of tunnel (20 spray header) used for wash stages, 2m of rinse stages.



Example Part

The separate tunnels operating in parallel are of different design to accommodate the wide variety of part shapes:

- Tunnel A handles parts of flat/uniform shape, transferred through the tunnel on a continuous in-line metal mesh conveyor, parts in fixed position. Spray impingement from top and bottom effectively contacts parts on all surfaces.
- Tunnel B handles parts of more complex shape in a spiral conveyor. Rotation of the spiral channel conveys the parts through wash and rinse zones, rotation exposes all surfaces to spray impingement from a single spray header.



BHC Recommended Process:

Chemistry: AquaVantage 3800 GD

- Effective for a wide variety of manufacturing soils.
- Low foaming for use in spray wash units at higher pressures.
- NPE and phosphate free – disposal restrictions in plant region near large number of fresh water lakes.

Total wash tank volume: 600 gallons (2,280L)

Concentration: 3%

Wash Temperature: 131-140°F (55-60°C)

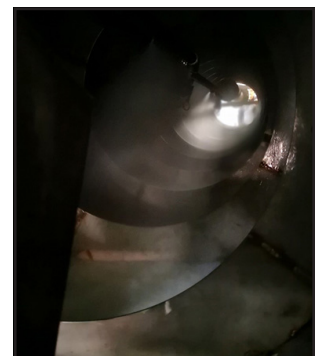
Clean Time: 6-7 minutes

Rinse Temperature: 77°F (25°C)

Rinse Time: 3-4 minutes

Spray Pressure: 0.6MPA/87PSI

Results: Excellent cleaning performance



Spray orientation in Tunnel B