



ADVANCED CLEANING
& SANITIZATION SYSTEMS

CYBERJET-SAN SERIES

Conveyor Style Cleaning
and Sanitization Systems



Cleaning & sanitizing systems built specifically for FOOD and PHARMA industries!

Cyberjet “SAN” cleaning systems are designed to clean and sanitize the toughest bins, baking pans, etc. at high volume and on a 24-7 basis. This line of machinery is generally built to clean design principles and 3-A standards and offers a full range of wash, rinse, sanitize, and dry options.

Six Principal Modules



Spray

Three (3) sizes of recirculating spray modules for wash and rinse stages



Rinse/Sanitize

Recirculating and fresh rinse stages plus sanitization with heat or chemistry



Dry

Three (3) different dry modules: blow-off, heated & non-heated

Typically, systems will have a least two (2) modules for a wash/rinse sequence and often have 4 or more modules for sequences such as wash, rinse, fresh rinse/sanitize, and dry.

Applications

Food/Pharma/Medical



Any Bin, Container, or Drum

- Systems can be designed to clean anything from small containers to macro bins
- Food... bins used for harvesting, processing, or distribution
- Pharma/cosmetic... bins used for compounds or product storage
- Medical... sanitization of medical waste containers



Baking Pans and Molds

- Systems have the power to clean the toughest pans, baking sheets, and molds
- Sheets and pans for cookies, pizzas, muffins, cakes, etc....
- Molds for chocolates and candies
- Items can be cleaned “right side up” if requested



Stainless Steel Trays, Bins, Gondolas

- Virtually any size bin... weight is not an issue
- Any item used in meat processing
- Any item used in pharma, cosmetics, or medical



Standard Features



3-A Sanitary Standards

- Machines conform with most 3-A construction standards
- Sanitary spray and dry manifolds, sloped floors to avoid standing water, continuous inside welding (TIG)
- Complete access to the spray and dry chambers and to the tanks



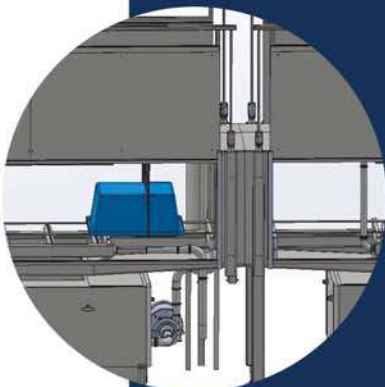
Stainless Steel Construction

- All "wetted" parts of the system are stainless steel... sheet metal, pumps, blowers, etc.
- The exterior of the system has a natural stainless steel finish. Only components such as motors and wire-way are painted
- The main control panel is also stainless steel... NEMA 4X



Powered Vertical Doors

- Each module has a powered, vertical door with push button control
- Offers complete access to the spray/dry chambers
- Doors are powered with pneumatic cylinders on both sides
- Doors are gasket-less to prevent microbial growth



Insulation and Stainless Steel Covers

- All vertical surfaces are insulated/guarded to the maximum extent possible
- A second sheet of stainless material is spaced 1" from hot surfaces to create a protective air gap
- There is no insulation material that can get wet and lead to microbial growth

Standard Features



Conveyor Options

- Standard conveyor type is parallel roller chain to maximize underside opening (belts are optional)
- Rated load is 50 lbs. per linear foot (higher capacities are available)
- Conveyor drive is variable speed, rated for 50-lbs./linear ft.
- Electronic "Smart Drive" (senses torque/offers jam protection)
- Variable speed, 1-10 FPM



Spray and Dry Manifolds

- All manifolds are stainless steel
- All spray manifolds are accessible via the canopy access doors...including the bottom manifolds
- The bottom spray manifolds can be removed without disconnecting the conveyor



Central Control Station

- Controls for all modules are housed in one central control station with NEMA 4X rating
- Built-in main breaker disconnect (rotary style lockable)
- Digital thermostats for each tank and air heat system (via PLC)
- 7-day / 24-hour timer; controls water heaters (via PLC)
- PLC / HMI: Allen Bradley Micro850 / Panelview 800 (optional upgrade)



Model Specifications

| Module | Type of Module | Conveyor Width | Working Height | Canopy Length | Length of Spray Zone | Tank Size / Heat (Nom. Temp) | Pump Size / Output |
|---------|-----------------------------------------------------------------------------------------------------------------------|----------------|----------------|---------------|----------------------|------------------------------|------------------------------------|
| C-24-S3 | Short Spray Recirculated | 24" | 16" | 68" | 36" | 200 gal. / 36 kW (140°F) | 10 HP, 100 GPM / 60 PSI |
| C-24-S5 | Long Spray Recirculated | 24" | 16" | 92" | 60" | 300 gal. / 48 kW (140°F) | 15 HP, 150 GPM / 60 PSI |
| C-24-FR | Fresh Water Rinse | 24" | 16" | 30" | 12" | n/a | 3 GPM / 30 PSI (Customer Supplies) |
| | | | | | Length of Dry Zone | Air Heat System (Nom. Temp) | Blower Size / Output |
| C-24-SB | Blow Off | 24" | 16" | 30" | 12" | n/a | 10 HP, 500 CFM |
| C-24-DA | Non-Heated Dry | 24" | 16" | 72" | 60" | n/a | 10 HP, 1900 CFM |
| C-24-DH | Heated Dry | 24" | 16" | 72" | 60" | 48 kW (250°F) | 10 HP, 1900 CFM |
| All | <i>Conveyor load height is 40" above the ground; exposed conveyor on either end for loading and unloading is 18".</i> | | | | | | |
| Module | Type of Module | Conveyor Width | Working Height | Canopy Length | Length of Spray Zone | Tank Size / Heat (Nom. Temp) | Pump Size / Output |
| C-36-S3 | Short Spray Recirculated | 36" | 16" | 68" | 36" | 250 gal. / 48 kW (140°F) | 15 HP, 150 GPM / 60 PSI |
| C-36-S5 | Long Spray Recirculated | | | 92" | 60" | 375 gal. / 60 kW (140°F) | 15 HP, 200 GPM / 60 PSI |
| C-36-FR | Fresh Water Rinse | 36" | 16" | 30" | 12" | n/a | 4 GPM / 30 PSI (Customer Supplies) |
| | | | | | Length of Dry Zone | Air Heat System (Nom. Temp) | Blower Size / Output |
| C-36-SB | Blow Off | 36" | 16" | 30" | 12" | n/a | 15 HP |
| C-36-DA | Non-Heated Dry | 36" | 16" | 72" | 60" | n/a | 15 HP, 3000 CFM |
| C-36-DH | Heated Dry | 36" | 16" | 72" | 60" | 48 kW (250°F) | 15 HP, 3000 CFM |
| All | <i>Conveyor load height is 40" above the ground; exposed conveyor on load end is 14" the unload end is 18".</i> | | | | | | |
| Module | Type of Module | Conveyor Width | Working Height | Canopy Length | Length of Spray Zone | Tank Size / Heat (Nom. Temp) | Pump Size / Output |
| C-48-S3 | Short Spray Recirculated | 48" | 16" | 68" | 36" | 300 gal. / 48 kW (140°F) | 15 HP, 200 GPM / 60 PSI |
| C-48-S5 | Long Spray Recirculated | 48" | 16" | 92" | 60" | 450 gal. / 72 kW (140°F) | 20 HP, 250 GPM / 60 PSI |
| C-48-FR | Fresh Water Rinse | 48" | 16" | 30" | 12" | n/a | 5 GPM / 30 PSI (Customer Supplies) |
| | | | | | Length of Dry Zone | Air Heat System (Nom. Temp) | Blower Size / Output |
| C-48-SB | Blow Off | 48" | 16" | 30" | 12" | n/a | 20 HP |
| C-48-DA | Non-Heated Dry | 48" | 16" | 72" | 60" | n/a | 20 HP, 4000 CFM |
| C-48-DH | Heated Dry | 48" | 16" | 72" | 60" | 60 kW (250°F) | 20 HP, 4000 CFM |
| All | <i>Conveyor load height is 40" above the ground; exposed conveyor on either end for loading and unloading is 18".</i> | | | | | | |

Optional Features



Sanitization

- Systems can sanitize with heat and/or chemistry
- If heat is the approach, water temperatures are increased to exceed 180° F
- If chemistry is preferred, one of the tanks is charged with a sanitizing chemistry
- Or, the sanitizing agent can be injected into the fresh rinse stream



Heat Options

- Solution tanks can be heated with either natural gas or with steam (in lieu of electric)
- Gas heat includes: industrial level gas burner; heat exchange tube below the water level; insulated exhaust stack; complete incoming gas valve train (customer needs to only hook-up one (1) main gas line and one (1) main pressure regulator)
- With steam heat, steam can be injected directly into the bath or a "plate coil" heat exchanger can be installed so the bath is not diluted with condensate. Systems include incoming valve train and a steam trap



Filtration

- Stainless steel filter housing is at the discharge side of the pump, filtering 100% of the solution before it goes into the spray headers
- Pull-out-strainer basket
- Optional filter bags can be inserted
- Pressure gauge after the filter indicates need for cleaning
- Safety cap blocks spray-out if gasket fails



Electric, Control, and Data Options

- Upgrade of the PLC/HMI to Allen Bradley Compactlogix and 1000
- Panelview (with Ethernet communications)
- EBL-11 Beacon Light (1 color) mounted on top of the panel
- EBL-22 Beacon Light (3 colors) mounted on top of the panel
- 230 Volt/3-Phase electric in lieu of 460 Volt/3-Phase



Conveyance Options (plus Lifting, Flipping, and Stacking)

- Conveyor rails are provided to help prevent parts from shifting; rails can be fixed or adjustable
- Optional feed and discharge conveyors... consult factory for your specific need

Optional Features



Sump Tank

- Used to pump out multiple tanks as well as diverted rinse water or overflow water
- Includes a stainless steel sump tank, an air operated diaphragm pump, water level controls, valves for each tank drain, and plumbing connections from the sump pump to all designated drains on the washer



Pressure Sensor

- An electronic switch to detect low pressure
- Typically installed after a filter to indicate when a filter bag needs to be replaced
- A "low pressure" signal appears when the pressure falls below "X" value



Flow Sensor

- An electronic switch to detect flow (does not quantify exact flow)
- Typically installed after an air blower or chemical pump to confirm proper operation
- A "no flow" signal will appear if flow is not detected



Steam Exhaust System

- Fan is mounted on the roof and ducted so as to create negative drafts on both ends of the system
- Customer provides duct work from discharge side of fan
- The fan is stainless steel, the ducting is CPVC



Additional Options

Better Engineering offers several other options including:

- Special belting options
- Conductivity meter
- Chemical dosing pump
- Chemical siphon valve

Aqueous Detergents



Better Engineering Aqueous Detergents

These detergents are specially formulated to maximize cleaning performance and to protect your machine. These detergents, backed by “BE’s” chemistry department and factory test center, allow Better Engineering to offer customers a full service cleaning solution.

Benefits of “BE” Chemistry



Biodegradable – No VOC'S, non-flammable, and generally non-hazardous



Lower pH's – Generally safe on all metals



Forces oils to the surface for easy skimming



Low foaming – Designed for powerful spray washers and agitation



Excellent rust inhibition



Free-rinsing

Lab Test Services

Engineering Test Lab & Machine Demonstration Center

Better Engineering has a complete engineering lab and machine demonstration center to test clean your items. We feel that seeing is believing and that is why we invite you to visit our plant and test center in Joppa, MD to see your pieces get cleaned first-hand. Or send us your parts and we'll test clean them for you. Every test comes with a detailed report of our process, the results, and the recommended machinery. Contact us for additional information or to schedule your FREE parts cleaning test.



From Visibly Clean to Microscopically Clean

Cleaning and Sanitization Systems



C-48-S5
Macrobin Washer



C-48-S5
Organic Recycling Bin Washer



C-42-S5/S5/S5
Medical Waste Bin Washer



C-24-S4/S4
Cosmetic Container Washer



C-36-S5/S3/SB
Medical Waste Bin Washer



F-PTL-5000
Bin/Vat Washer



D-24
Pharma Drum Washer



CE-3000-SAN Pharma
Turntable Style System



F-7000-P-ZX-SS Cosmetic
Turntable Style System



CE-3000-ZX-SAN Cosmetic
Tube Cleaning Washer



CE-3000-SAN
Cosmetic Mixers Washer



Rack Washer
Food Tray Washer



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