

PRODUCT SPECIFICATIONS BROCHURE

# CYBERJET SANITARY SERIES

Hygienically Designed Tunnel Washer



# THE BE ADVANTAGE



AUTOMATED BIN FLIPPING AND STACKING CAPABILITIES



DATA ACQUISITION SYSTEM



CUSTOM BELTING AND FIXTURING



FULL ACCESS CANOPY DOORS

# CLEANING & SANITIZING SYTEMS FOR FOOD, PHARMA, NUTRACEUTICAL AND COSMETIC INDUSTRIES

The Cyberjet "SAN" cleaning system is the ultimate solution for cleaning and sanitizing even the toughest dunnage, bins, racks, baking pans, luggers, and totes continuously throughout the day. These machines are built with clean design principles and to 3-A standards, providing a complete range of washing, rinsing, sanitizing, and drying options. With Cyberjet "SAN," you can be confident that your facility is equipped with the best machinery on the market to maintain cleanliness and sanitation.

# **PRINCIPAL MODULES**



#### S P R A Y Three (3) sizes of recirculating spray modules for wash

spray modules for wash and rinse stages



#### RINSE/SANITIZE

Recirculating and fresh rinse stages plus sanitization with heat or chemistry



### DRY

Three dry module options: blow-off, heated & non-heated

# APPLICATIONS



#### Any Bin, Container, or Drum

- Systems can be designed to clean any reusable plastic container
- Food: bins used for harvesting, processing, or distribution
- Pharma/cosmetic/nutraceutical: bins used for compounds or product storage



#### **Baking Pans and Molds**

- Systems have the power to clean the toughest pans, baking sheets, and molds
- 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



Better Engineering's tunnel washer is customizable and flexible, making it perfect for a variety of industries.



# STANDARD FEATURES (1/2)

### **High Volume Spray Pumps**

- Working tank equipped with a high-volume spray pump; stainless steel
- Sanitary-type pumps are optional

#### **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 4
- Washdown componentry is also available as an option. Customers can select 304,

#### **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 linear actuators on both sides
- Doors are gasket-less to prevent microbial growth

### **Stainless Steel Covers**

 A second sheet of stainless materials is spaced off of hot surfaces to create a protective air gap

### Water Level Controls and Auto Fill

- Includes sensor for four water levels: emergency high, emergency low, running level, stationary level
- Water is automatically added when water is not at "Running" or "Stationary" levels based on machine state
- Water level sensor with digital readout

# STANDARD FEATURES (2/2)







#### **Conveyor Options**

- 1. Stainless steel "flat wire" belting 3/8" high with 1" x 1" openings
- 2. Variable speed 1-10 FPM
- 3. Rated for 50 lbs per linear ft
- 4. Take-up bearings on the load end/ torque limiting device on drive end

# Spray and Dry Manifolds

- All manifolds are stainless steel with quick disconnect connections as an option
- All spray manifolds are accessible via the canopy access doors...including the bottom manifolds
- The bottom spray manifolds can be removed without without removing the

### **Central Control Station**

- NEMA-4 (mild steel/painted) rating is standard on the control panel, with the option to upgrade to NEMA-12
- The standard PLC is Allen Bradley's micro850 with AB Compactlogix as an optional upgradea
- Equipped with a 2-channel, 7-day/24-hour timer; controls water heaters and optional oil skimmer(s) (using the HMI)
- The control panel is equipped with a speed dial to control conveyor speed (1-10 FPM)





# OPTIONAL FEATURES (1/4)





### **Oil Skimming**

- For skimming oils from a given tank, BE offers two options:
- 1. The OSB motorized belt skimmer. This skimmer has a stainless steel belt and is controlled with a 7 day/ 24 hour timer
- 2. The OWC oil water coalescer. This stainless steel coalescing tank comes in two sizes, small or large, for "light" and "heavy" oil applications

### **Filtration**

- Bag filter (hinged top and eye bolts) is installed on the pressure side of a given pump to trap suspended particles before they can be redeposited on the parts
- Pressure gauges indicate when the filter bag (specify micron rating) has to be changed



# **Beacon Lights**

• A beacon light is mounted on top of the main electrical enclosure. EBL-3 is a 3 color beacon light

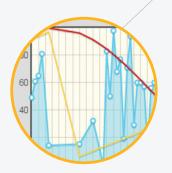
### **Steam Exhaust System**

- 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 vent port(s) on the top of the machine are connected to a central fan with a non-corrosive duct
- Steam exhaust systems come default with a drip leg
- Steam exhaust type differs depending on machine type and machine use

# **PLC HMI Upgrade**

- The PLC is upgraded to Allen Bradley's Compactlogix
- The upgraded HMI is a Panelview Plus 7
- The system includes Ethernet capability

# OPTIONAL FEATURES (2/4)











# **Complete Data Acquisition System**

The Rotary Drum washer is equipped with all the necessary hardware and software to effortlessly acquire and analyze data, providing a reliable and efficient data acquisition system. Enhanced features include:

- PLC upgrade for OPC-UA compliance and Ethernet communications with an ethernet switch (Must also purchase the Compactlogix PLC upgrade, not included with this option.)
- "OAS" DAQ Software includes Historian, Alarms, Trends & Reports
- Industrial PC mounted inside the main control panel. With this option, the user has access to all data via a web-based platform

#### **Pressure Switch**

- 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 Switch**

- 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 it flow is not detected

### **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

# **Conductivity Meter**

- This includes a sensor for a designated tank and a digital meter (mounted on the main panel)
- Can be used to detect dirty rinse water or low chemistry in a tank (check with a chemistry supplier for suitability)

# **OPTIONAL FEATURES** (3/4)

### **Chemical Dosing Pump**

- Automatically adds chemistry to a tank (from customer's chemical tote)
- Assumes the customer's chemical tote is within 5 feet of the pump

### **Chemical Siphon Valve**

- This purely mechanical device siphons detergent into the water fill line
- Adds "X" GPM of detergent for a given flow of fresh water

#### **Robotic Integration**

 Better Engineering is a certified integrator for robots and uses robots in multiple ways to bring automation to the highest level challenging applications, the customer can add a 3rd or 4th high capacity

### **Additional Rinse Stages**

• There are two additional rinse stages that can be ordered. For especially challenging applications, the customer can add a 3rd or 4th high capacity working tank

### Vacuum Dryer

• Vacuum Dryers are a key solution for industries looking to thoroughly dry parts with recesses, save energy, and increase dry time speeds. Vacuum drying is a complementary technology that, when combined with traditional blow-off methods, offers 100% part dryness, regardless of part intricacies

### **Additional Options**

• With over 64 years of experience in the industry, Better Engineering is the go-to solution for industrial cleaning systems. We offer additional optional add-ons and can customize our machines to clean even the most challenging parts and materials. Our team of experts takes pride in delivering top-notch solutions to our client's unique cleaning needs. Feel free to contact one of our sales associates to learn how we can assist you.

# **OPTIONAL FEATURES** (4/4)



#### **Drying Modules**

Better Engineering offers drying modules as well as simple blow-off sections. The drying modules have the following specifications:

- 1. Centrifugal blowers for high air velocity
- 2. Recirculation system to conserve heat and prevent "blow-out"
- 3. Optional air heater to boost the air temperatures up to 250 degrees F
- 4. Top and bottom air knives
- 5. Pitched floor directs most of the water back to the previous spray

"Better Engineering was willing to customize a solution for our bin washing process, whereas other vendors only offered existing products. Through our partnership, we took our learnings and got to iterate, resulting in an even more customized machine for our application." - Marlene K., Product Engineer, SN 23508

# AQUEOUS DETERGENTS

### **Better Engineering Aqueous Detergents**

At BE, we take pride in being your trusted partner for cleaning needs. We understand the importance of environmental and sustainability goals and have taken steps to ensure that our products align with these objectives. Since the 1980s, we formulated solvent-free technology chemistry to wash our client's products. BE's custom-formulated detergents are designed to provide superior cleaning performance while safeguarding your equipment's lifespan. Our skilled chemistry department and factory test center ensure that our detergents are of the highest quality. We offer full-service cleaning solutions to our customers, backed by our expertise and experience.



### ECO-FRIENDLY, SOLVENT-FREE DETERGENT DESIGNED TO HELP MEET SUSTAINABILITY GOALS





# **Engineering Test Lab & Machine Demonstration Center**

Better Engineering provides advanced laboratory testing services that showcase the efficiency of our indutrial cleaning systems. BE invites you to send us your most challenging parts for a thorough cleaning test and experience the BE advantages of our cleaning processes. After performing the cleaning test, a comprehensive report on our findings, results, and recommended machinery will give you the confidence to trust Better Engineering with all your part cleaning machine needs. Don't hesitate to contact us to schedule your FREE parts cleaning test and learn more about our services.

# FROM VISIBLY CLEAN TO MICROSCOPICALLY CLEAN CLEANING AND SANITIZATION SYSTEMS



Macrobin Washer



Organic Recycling Bin Washer



Medical Waste Bin Washer



Cosmetic Container Washer



Medical Waste Bin Washer



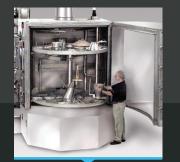
Bin/Vat Washer



Pharma Drum Washer



Pharma Turntable Style System



Cosmetic Turntable Style System



Cosmetic Tube Cleaning Washer



Cosmetic Mixers Washer



Rack Washer Food Tray Washer



1802 Fashion Court Joppa, MD 21085 USA

Phone: 410-931-0000 Toll Free: 800-229-3380 Email: info@betterengineering.com