Industrial Parts Cleaning Systems



About Alliance Manufacturing, Inc.

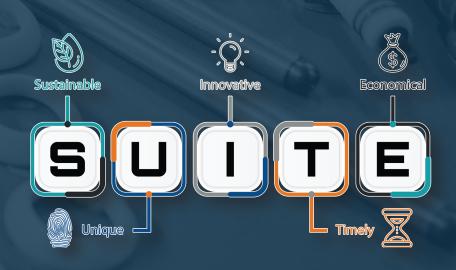


Alliance Manufacturing, Inc. was established in 1994. The company is located in Fond du Lac, WI and serves businesses in both the U.S. and international markets.



From Ken Manninen, President of Alliance Manufacturing: "The growth and success of Alliance Manufacturing, Inc. is the result of hard work and dedication to manufacturing a superior line of products."

Alliance Manufacturing, Inc. specializes in the conceptual design, engineering, and manufacturing of industrial parts washers and parts cleaning systems. Our machines are engineered for specific cleaning applications and are designed to meet the production and cleanliness requirements of our customers. From small companies to multi-national corporations, we have manufactured parts cleaning systems for a wide variety of customers across several industries. Whatever your parts cleaning requirements, Alliance is dedicated to providing the best possible solution for your individual needs.



Here at Alliance, we model our business practices after the "SUITE" principle: Sustainable, Unique, Innovative, Timely, and Economical!



Why Choose Alliance?

Mission Statement: To be the leading provider of innovative solutions in automated parts/component cleaning and sanitizing equipment.

Ease of Maintenance

- Complete access to all process zones
- Pull-out spray headers and removable nozzles
- Efficient water filtration
- Convenient tank accessibility

Quality

- Corrosion-resistant materials
- Brand-name components
- Energy efficient and environmentally friendly
- Aesthetically appealing

Flexibility

- Engineered per cleaning application
- Ability to meet customer specifications
- Easily interface with system integrators
- Many optional accessories available

Experience

- Experts since 1994 with over 1000 machines sold
- Qualified staff utilizing latest technology
- In-house engineering, programming, and assembly
- Cleaning effectiveness tested and verified

Customer Satisfaction

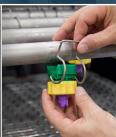
- Numerous repeat customers
- Timely service
- Ergonomic and safe designs
- Focus on sustainability
- Attention to detail



Alliance's Exclusive *Full-Access* Canopy U.S. Patent #5,630,435

- Unobstructed interior access: Canopy segments are easily removed for complete, unobstructed, and safe access to all interior areas for ease of maintenance and process adjustments.
- Corrosion resistance: Resists attack from water and commonly used cleaning detergents.
- Durability: Reinforced design creates a strong, durable construction.
- Thermally efficient: Insulative qualities improve heating efficiency and reduce operating costs.
- Sound dampening: Provides a quieter, safer working environment.
- Aesthetically appealing: Molded shape is visually appealing and easy to clean.









Conveyorized Belt

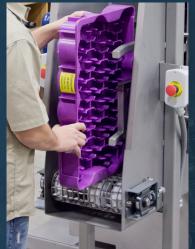
Alliance conveyorized belt cleaning systems are designed for the inline cleaning of a wide variety of manufactured parts. Conveyor belt parts washers are designed primarily for cleaning at higher volume production rates, and for parts ranging from small to large sizes. Conveyorized belt parts washers feature a variety of configurations in process zones, belt sizes, product height clearances, multiple product lanes, special return conveyors, and optional accessories. Standard designs may be all that is required, while endless custom configurations can be engineered to meet the specific parts cleaning needs.



E-Series: An economical alternative to larger cleaning systems, customizable per cleaning application, and ideal for manufacturing work cells and limited-space applications.



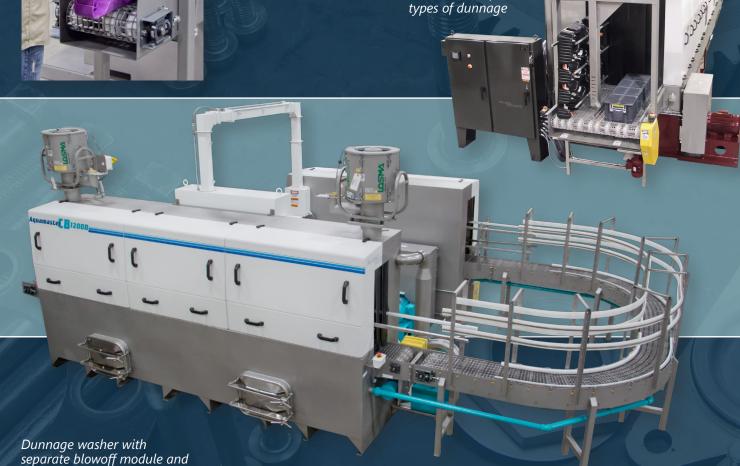
Dunnage washers for tall-profile trays



Alliance

Conveyorized Belt - Dunnage

With the increasing demand for tighter part cleanliness, the need for clean dunnage is becoming more crucial. Alliance has engineered a line of conveyorized belt parts washers specifically designed for cleaning reusable dunnage, containers, pallets, vacuum-formed trays, totes, and lids. Dunnage washers are available with single or multiple lanes to accommodate various product sizes and volumes, as well as features such as adjustable lane guide for tall-profile parts and powered entrance/exit conveyors. Clean dunnage is essential to keeping manufactured parts free of contaminants as they are shuttled between operations or being delivered to the end user.



Lane dividers for multiple

180-degree return conveyor

Conveyorized Chain

Alliance conveyorized chain washers are designed for cleaning parts placed on a dual chain conveyor, parts placed in fixtures attached to a chain conveyor, and parts conveyed on pallets. As pallets are shuttled to various machining operations, they can become contaminated, which can be detrimental to subsequent operations. Conveyorized chain washers can be integrated into the system for cleaning palletized parts and flushing empty pallets. Conveyor design, cell layouts, cycle times, and pallet transfer methods are all considered. In addition to cleaning palletized parts and pallets, conveyorized chain parts washers can also clean parts placed on fixtures attached to the chain conveyor and parts placed directly onto the chain conveyor.





Conveyor stops allow for specialized cleaning of palletized parts. Palletized conveyor systems clean both empty parts pallets and palletized parts.



Cleaning system with part fixtures on a chain conveyor



Return conveyor configurations easily integrate Alliance's washers into manufacturing operations.

Alliance Dipoli Dipoli

Profile plate verifies correct part loading.

Sensors indicate the presence of a part in the fixture.



Rotary Indexing system with single load/unload location and multiple index zones

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Conveyorized/Rotary Indexing

Meeting the cleanliness requirements of complex parts requires precise spray nozzle and air knife positioning. For high-volume parts, Alliance accomplishes this by utilizing indexing conveyor systems in semi and fully automated work cells. Start/stop conveyor movement along with stationary and moving spray manifolds with strategically positioned nozzles are utilized for cleaning leading and trailing surfaces, blind holes, and passageways. Custom part fixtures attached to chains hold parts securely in position as they convey and stop at precise positions throughout the cleaning system. Parts are dried through the use of blowers and time compressed air for dislodging moisture from targeted part features. Indexing is accomplished through the use of sensors to seamlessly communicate with automated loading and/or unloading devices.



Conveyorized Indexing system with custom part fixtures

Conveyorized Rotary Drum

Alliance conveyorized rotary drum cleaning systems are designed to efficiently clean and dry small, high-volume, non-precision parts where continual throughput is required. The perforated stainless steel drum allows fluid to drain quickly while internal welded flights and kicker bars convey parts through the system using a gentle tumbling action. Stainless steel load and unload chutes are standard on all drum-style parts washers. Drum diameter, machine length, flight pitch, and perforations are all sized based on part dimensions, production volume, and application.



Drums are engineered per application.



Welded kicker bars aid in tumbling.



Ideal for small parts in high volumes.



As with all Alliance machines, the rotary drum machine comes standard with removable canopy segments for each process zone.



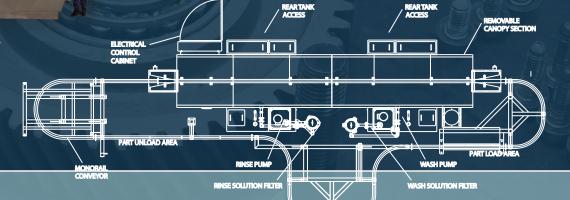
Several options and configurations are available for rotary drum cleaning systems.



Conveyorized Monorail

Alliance conveyorized monorail parts washers are designed for integration into a variety of monorail conveyor systems or as standalone units. Monorail parts washers are best suited for high-volume production and inline manufacturing operations. Machines are available in multiple process stages and are engineered to accept internally or externally mounted monorail mounting to accommodate the customer's existing monorail system. With standalone systems, hangers are manufactured to hold specific parts without scratching component surfaces, ensuring a firm fit and uniform travel throughout the cleaning system.

Our engineers consider part configuration, product flow, contamination, volume, and part cleanliness/dryness requirements before concepts are presented to the customer.







Integration: Our systems feature internal or external monorail mounting, dependent upon customer application.

Top/Front Load Cabinet

Alliance cabinet washers are available in both top-loading and front-loading styles, designed for batch cleaning of parts. The turntable is supported at the circumference, eliminating the need for a center bearing. This prevents a cleaning blind spot and allows the operator to load parts anywhere on the turntable with uniform cleaning results. Our cabinet washers include many standard features not found with competitors' machines: Direct-drive turntables, tank clean-out doors, level controls, low water safety shut-off, and internal debris rinsing. In addition to standard turntable models, Alliance cabinet washers can be fitted with custom interchangeable stationary fixtures for cleaning specific parts with complex features such as deep blind holes. Interchangeable fixtures reduce costs by allowing a multitude of fixtures to be utilized within the same washer.



Simple and efficient: Cabinet washers simplify and automate daily cleaning tasks.



Various turntable sizes and process stages are available.



Even large parts can be cleaned in an Alliance cabinet washer. The door is designed to allow parts to be placed in via overhead hoist. A spacesaving roll-in door is also available as an option.



High-pressure cleaning station

Alliance

Other/Custom Cleaning Systems

When specially engineered custom industrial parts washers are required, Alliance delivers with unmatched expertise, dedication, and service. Our commitment to innovative engineering and quality craftsmanship enables us to effectively accomplish the requirements of a complex parts cleaning applications. We can modify any of our standard machines to fit the project or we can engineer a one-of-a-kind parts cleaning system. Alliance prides itself on developing unique solutions from concept through completion. In addition to water-based systems, Alliance offers machinery for other types of cleaning applications.



Immersion dip and spray system



Oil dip machine for rust prevention



