



SundWASH High Pressure Washdown Systems for the Food and Beverage Industries

High Pressure Water On Demand





Why SundWASH?

Plant, maintenance &

sanitation managers in the food processing industry require high pressure washdown systems for cleaning & sanitation, odor control, dust suppression, deboning and a wide range of other processing applications. High pressure is the key to efficiency, and the ability to boost pressure on demand enables operators to clean faster, conserve water, use fewer chemicals and save money.

With over 50 years' experience in manufacturing high pressure water pumps, Sundyne is uniquely qualified to deliver a complete washdown system that meets the performance & reliability expectations of Food and Beverage processors.



SundWASH High Pressure Washdown systems are designed and manufactured by Sundyne, LLC in Arvada, Colorado USA.

Superior Reliability

The SundWASH system is more than a pump. It is a complete pre-engineered system that includes all the pressure, temperature, and flow devices needed to insure the total protection of the system. Our SmartBypass[™] controls the system, providing the perfect amount of water on demand. Whether it's one person using the system, or many people at one time, they can count on a reliable supply of washdown water.

Efficient Use of Water Saves Money

The SundWASH system is a high pressure washdown design. Operating a washdown system at high pressure enables operators to deliver superior cleaning results compared to low pressure designs while **USING SIGNIFICANTLY LESS TIME** and **WATER**. Reducing the consumption of water during washdown operations can save plants thousands of dollars just in the first year of operation.

Scalable, Compact Design

The SundWASH system is a modular design. As the plant demand for washdown capacity (flow) increases, additional pumps can be simply and economically added to the SundWASH system to keep up with the increased demand without compromising performance (pressure) or efficiency. Its compact footprint allows the system to fit into almost any central utility room.

Simplified Maintenance

At the heart of every SundWASH system is a Sunflo, industrial duty, high pressure centrifugal pump. The close-coupled design eliminates the need to align multiple components (pump/gearbox/driver) and maintain multiple sets of bearing frames.

Water Savings Calculation

SundWASH systems are more effective than Pitot Tube systems

SundWASH System: 7 gpm per wand @ 900 psi Cleaning effectiveness: 7 x 900 = 6300 Cleaning Units

Water Savings

5 gpm savings per wand 5 gpm x 50 wands = 250 gpm 250 gpm x 60 min/hr = 15,000 gal/hr 15,000 gal/hr x 8 hr/day = 120,000 gal/day 120,000 gal/day x 6 days/week = 720,000 gal/week **720,000 gal/week x 50 weeks/year = 36,000,000 gal/year**



Financial Savings

36,000,000 gal/year x \$.008/gal = \$288,000/year



Time & Labor Savings

33% increase in cleaning effectiveness

translates into improved productivity and reduced operational costs.

Typical Pitot Tube Washdown Systems: 12 gpm per wand @ 400 psi

Cleaning effectiveness: 12 x 400 = 4800 Cleaning Units

Applications

Cleaning And Sanitation

- Belt Cleaning
- Equipment Washdown
- Surface Cleaning
- Central Cleaning Systems
- Tank Cleaning
- Barrel Cleaning

Processing

- Fish Scale Removal
- Crab Cleaning
- Poultry Deboning
- Livestock Processing
- Hatchery

High Pressure Misting

- Greenhouse Misting
- Odor Control
- Dust Suppression
- Livestock and Poultry Cooling

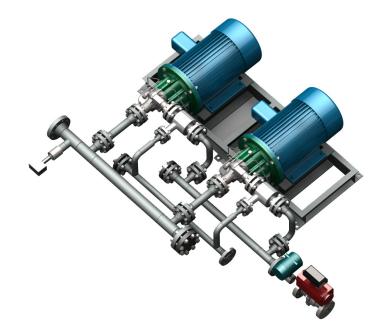




SundWASH Systems

Scalability On Demand

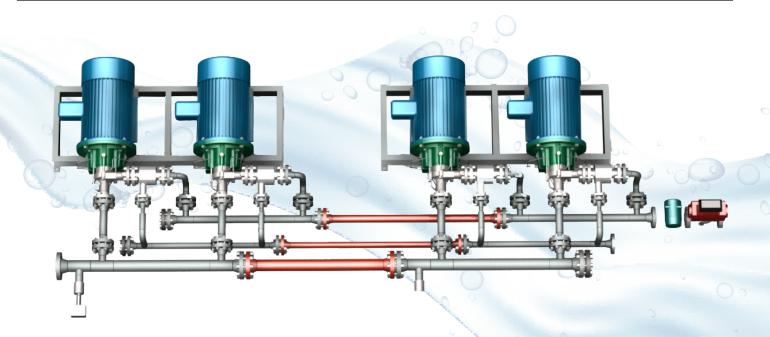
The challenging demands of a centralized cleaning system range from zero flow to all the cleaning wands being used just before a shift change. Often times a single pump cannot meet these needs – creating the demand for parallel pump systems that can scale as needed.

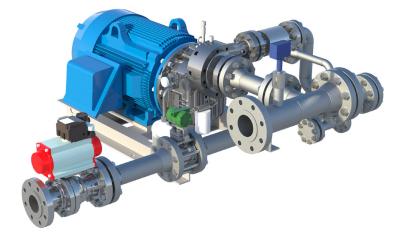


P2500 System

Up to four pumps in parallel for a maximum flow of 268 gpm at 900 psi.

P2500 System - 900 psi discharge pressure					
	Single	Double	Triple	Quad	
	67 gpm	134 gpm	201 gpm	268 gpm	
7 gpm wand capacity	10	19	29	38	
4 gpm wand capacity	17	34	50	67	





P3000 System

Up to two pumps in parallel for a maximum flow of 350 gpm at 900 psi.

P3000 System - 900 psi discharge pressure				
	Single	Double		
	175 gpm	350 gpm		
7 gpm wand capacity	25	50		
4 gpm wand capacity	44	88		



System Details

The SundWASH high pressure washdown system is a complete, purpose-built system, pre-engineered for total system protection regardless of user demand. Smart controls are specifically designed to regulate and maintain pump hydraulic performance within the allowed operating envelope of the pump.

Sunflo Pumps – provide the heart of the system, delivering constant, pulsation-free flow, with minimal maintenance requirements. A close coupled configuration, 316-SS construction, single high-performance Tungsten carbide/carbon mechanical seal, an integral Plan-13 Seal Flush, and Sunflo's "Impeller Cartridge Assembly" all contribute to quick & easy servicing on site (if needed).

Automatic Recirculation Valves – Insure that minimum continuous flow through the pump is maintained during times of low system demand.

SmartBypass[™] – The SundWASH system PLC turns on and off pumps operating in parallel, based on the water demand. It only runs the minimum number of pumps required to fulfill demand. By utilizing just what's needed, energy and water are saved. Other washdown systems bypass flow continuously as part of their safe operation mode – but the SundWASH SmartBypass facilitates significant power savings.

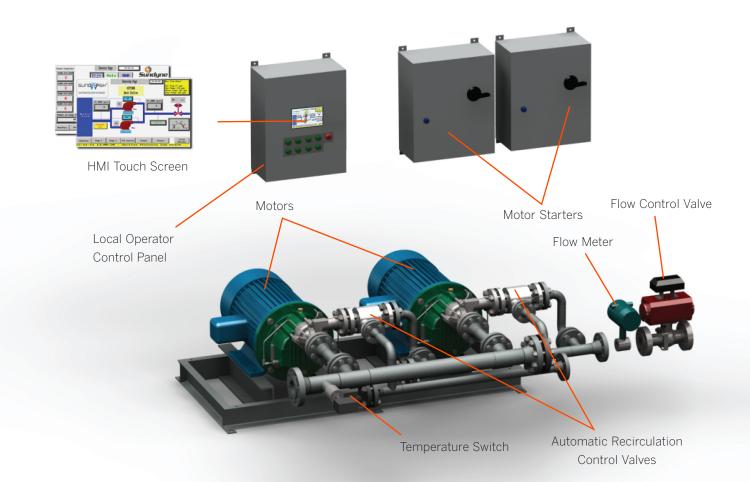
Flow Meter – Detects increases in demand for wash-water to start up additional pumps.

Flow Control Valve – Insures that the maximum flow rate of the system is not exceeded during high system demand.

Temperature Switch – Protects the system from damage due to high inlet water temperatures.

Local Operator Control Panel – Utilizes HMI touch screen for setting parameters and easily monitoring system conditions within a NEMA 4 enclosure.

Piping – Available in electroplated carbon steel or stainless steel.



Tired of Off-Site Service Programs?

Sunflo pumps are designed for low maintenance. But if ever needed – Sunflo pumps can be simply & easily serviced in minutes – on-site with no special tools! No need to remove your high pressure washdown pump and ship it off-site for expensive and time-consuming servicing.

Servicing a Sunflo pump is as easy as 1 - 2 - 3



- Pump remains in line
- Impeller Cartridge Assembly is easy to remove and replace
- No alignment or re-balance necessary

VS Pitot Tube STYLE Pumps



- Entire pump must be removed from system
- Service (including re-balancing) only available from the factory
- Pump must be realigned when re-installed



Repair Time: Days

Backed By Global Support

Sundyne is more than just a manufacturer of high quality compressors and pumps. We offer some of the fastest delivery times in the industry, and we back each product shipped with a full range of aftermarket support services, extending the value of our highly engineered machines well beyond the point of sale.

And with our engineered solutions, worldwide presence and compact designs, installation and maintenance has never been more efficient.

The Sundyne service team is here to help protect your investment and provide a trouble-free customer experience at every turn. That's **RELIABILITY REALIZED**.

Our Aftermarket Programs Include:

- Gearbox Exchanges & Upgrades
- Maintenance Kits
- Conversion Programs
- On-Site SundSCHOOL
- Field Service Support
- Overhaul and Repair Services
- Site Surveys
- Emergency Expedite Services

Sundyne: An OSHA VPP Star Site

At Sundyne, Environmental Health and Safety (EH&S) is integral to our culture of excellence, and providing a 100% safe work environment through the manufacturing and installation phases of a project is a core priority.

To learn more about our extended service offerings and specific application references, visit www.sundyne.com or contact us toll free at 1-866-SUNDYNE.



For more information please visit www.sundyne.com and fill out the Contact Me form. A Sundyne representative will contact you.



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