



300

PHARMACEUTICAL GRADE WASHER

- 4 different chamber sizes
- Single or double glass door for barrier integration with bio-seal type insulation
- Designed based on customer requests, meets cGMP - FDA and GAMP guidelines
- Reduced footprint, dimensions, utility consumption
- Flexibility to allow washing and drying of a wide variety of components
- Proven cleaning performance thanks to standard and customized racks and wash cycles



PHARMA SOLUTIONS

iwt
Washing Disinfection Automation

The W300 Series pharmaceutical grade washers have been designed to meet the most stringent customer requirements and to comply with international standards with a view to providing high-level performance together with ease of access to components, all within a minimal footprint.

- The washing chamber entirely made of AISI316L grade mirror finished stainless steel, fully welded and finely polished to a surface finish of $Ra \leq 0,6 \mu m$.
- All the water-wetted surfaces sloped to the drain.
- Rounded corners designed with a minimum radius $R=20mm$.
- No dirt traps.
- No threaded components (screws and bolts) inside the washing chamber in compliance with GMP requirements.
- Up to four dosing pumps (compatible with detergent and caustic soda) for accurate chemical dispensing (concentration in the tank monitored by a conductivity probe).
- Pipework made of high-grade AISI316L stainless steel featuring standard 3-A sanitary fittings, tri-clamp connections, a fall to drain, absence of dead legs and orbital welding finely polished to a smooth finish.



Model W300-100



Process tank



Piping

The washing system was developed and engineered bearing in mind the high level of cleaning required in the pharmaceutical industry.

Rotating top and bottom spray arms ensure outstanding performances thanks to the balance between the quantity and pressure of the water-chemical solution.

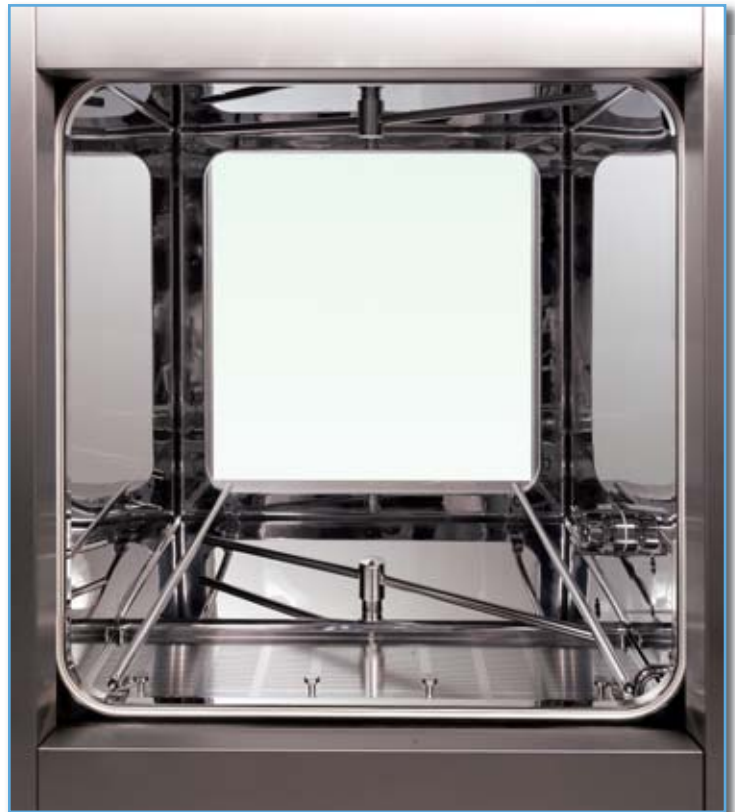
Dedicated spray jets fitted directly on the racks are also provided to guarantee a perfect coverage of the load, especially for irregularly shaped components for which dedicated solutions can be engineered and tested at the factory prior to delivery to the site, all making for a superb wash result.

Washing, rinsing, and drying cycles make use of the same piping.

The final GMP rinse is provided by Water For Injection (WFI) injected directly into the piping.

Software-hardware integration with the WFI loop is also available.

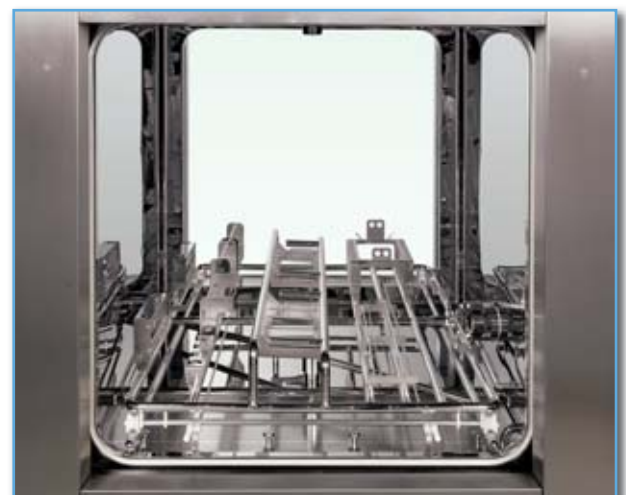
The high efficiency drying system, composed of a pre-filter, a fan and a HEPA filter (with EMERY testing connections) is provided to ensure not only perfect drying of the load, but also perfect drying of the piping and the washing chamber itself.



Chamber



Universal loading basket



Quick-lock customized basket



The W300 Series is suitable for processing of a wide range of components, from small glass vials, all the way through to injectors, pumps, compressing tools, feeding hoppers and pallets.

Small plastic or stainless steel containers and hollow components are washed both outside and inside by means of special sprayballs.

Unlimited washing solutions are available thanks to multipurpose, quick-lock racks built according to customer-specific needs.

An ergonomic transport trolley facilitates loading and unloading operations and ensures smooth handling throughout the facility.

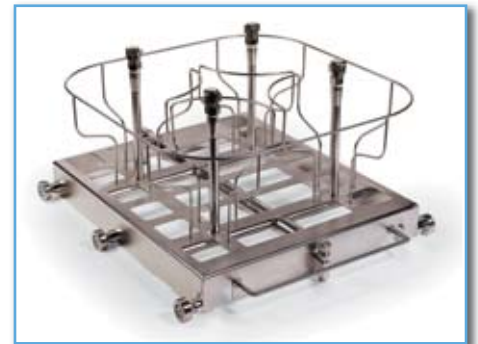
Single or double panoramic glass doors allow visual monitoring of the process as well as installation through the barrier. The double door configuration features interlocking doors and is suitable for pass-through applications thanks to a bio-seal type insulation provided on one or both sides.



Loading/unloading system



Customized loading basket



Large size flasks loading basket



Compressing tools

Valve

Dosing pump

Filling line component

The W300 Series comes as a modular machine available in 4 different sizes from 0.25 m³ up to 2.0 m³.

The cleaning process is micro-processor controlled offering fully programmable and customizable washing cycles with single or multiple detergents, rinse monitored by a conductivity probe on the drain, final GMP rinse, and drying to achieve the desired results.

The user-friendly multi-language touch screen HMI is a simple interface with all the critical parameters displayed in real time.

It may be connected to a printer or to a remote PC located in the supervisor's office for data monitoring and recording.

The start cycle is inhibited if the door is not properly closed and cycle progress onto the next stage is disabled if process parameters fail to match the set point. To guarantee operator safety, cool-down time is also foreseen to avoid any possible exposure to high temperatures.



HMI touch screen



Clean side view



Model W300-025

Ongoing research and development of new technologies, focusing on sustainable development, allows us to continuously reduce the environmental impact of both our washing machines and our production process.

Thanks to an innovative design we are able to constantly cut down energy, water and chemical consumption.

All of those principles also make for low running costs, shorter term break-even points and return on investment.

It is with this philosophy that we build excellent washing machines with high performances, technologically advanced and extremely safe for both operators and the environment.

A risk-based approach to validation checks the regulatory compliance and ensures that the equipment works as designed, meeting user specifications with guaranteed performances and safety.

A full validation package includes Factory Acceptance Test (FAT) which takes place just after the production and the internal testing phase for your absolute peace of mind. Installation and start-up are followed by the Site Acceptance Test (SAT), Installation Qualification (IQ), Operational Qualification (OQ) and Performance Qualification (PQ). These tests guarantee that both process and machine are effective and up to agreed user specifications. All equipments come with a GMP compliant documentation package, including but not limited to:

- User and maintenance manual
- Installation lay-out
- Electrical Drawing
- P&ID diagram
- Pneumatic drawing
- Main components technical data sheets
- Material certificates
- Welding certificates
- CE declaration form
- Validation protocols (IQ-OQ-PQ-FAT-SAT)

LOW UTILITY CONSUMPTION

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VALIDATION AND DOCUMENTATION

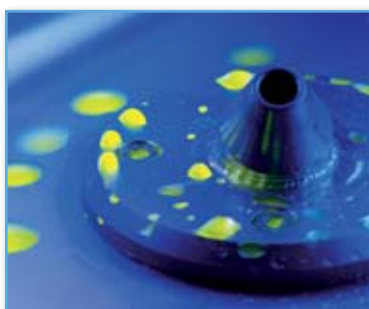
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Electrical testing instruments



Temperature and pressure calibrating instruments



Riboflavin cleaning assesment

W300



Version	W300-025	W300-050	W300-100	W300-200
Max load dim. W x D x H (mm)	630 x 630 x 630	800 x 800 x 800	1000 x 1000 x 1000	1260 x 1260 x 1260
Max load volume (m ³)	0.25	0.50	1.00	2.00
Footprint W x D (mm)	1850 x 1150	2250 x 1350	2650 x 1520	3170 x 1800
Overall height (mm)	2200	2400	2400	2650
Loading height (mm)	875	875	875	875
Loading weight (Kg)	60	90	120	150
Door	Single or double	Single or double	Single or double	Single or double
Tank capacity (L)	40	60	90	150

Main features

Construction material	AISI316L for all the wetted surfaces		
Wet surfaces finishing	Mirror finishing - Ra ≤ 0.6 μm		
Doors	Entirely made of glass, sliding horizontally, automated		
Water supply (entering from the top in the technical vane)	Softened water	DN25	2-3 Bar
	RO water or Demi water	DN25	2-3 Bar
	PW for rinse	DN25	2-3 Bar
	WFI for GMP rinse	DN25	2-3 Bar (optional)
Heating system	Industrial steam	DN25	2-3 Bar
	Electrical - heating elements		
Main electrical supply	400 VAC 50 Hz - 3 Phases plus neutral		
Controller	Simatic multi panel touch MP 277-8" with integral soft PLC		
Sanitary standard	3-A		
Regulatory compliancy	CE - cGMP - FDA - GAMP 5		

Related Products

To maximise operational efficiency and learn more about these products contact your local representative.



Logistics & Baskets

Logistic includes a wide range safe and ergonomic trolleys, carts and loading baskets to guarantee easy, safe and ergonomic management and transportation of the items throughout the facility as well as excellent washing and drying results for a wide range of loads.



GP Decontamination Lock

Designed to meet the specific needs of pharmaceutical and biotech industry it provides fast and effective low temperature decontamination process complementary to the autoclave sterilization by means of vaporized hydrogen peroxide featuring high quality standard, safety and safeguard of the environment thanks to the on-board catalyzer.



Safe Lock Doors

Created to ensure a perfect tightness for containment and barrier application in general, where separation is required and cross contamination is to be avoided.



HEADQUARTERS
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ISO-9001:2008 - Cert. n° 3406/1



Product sizes may undergo modifications. Please contact your local dealer for more information.

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