

Laboratory Glassware Washer

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Start standardizing cleaning process in your laboratory.



Laboratory Glassware Washer provides a standardized cleaning solution, with a traceable cleaning process, protect the safety of operators.



Application

Laboratory glassware washers can effectively clean a wide range of glassware, including beakers, flasks, test tubes, pipettes, burettes, and more. They can remove residues, contaminants, and other substances that may affect the accuracy and reliability of laboratory experiments.

Advantage

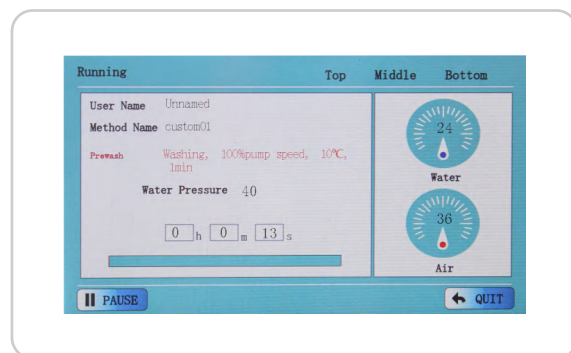
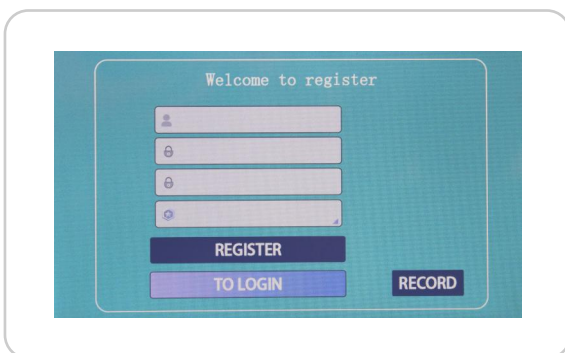
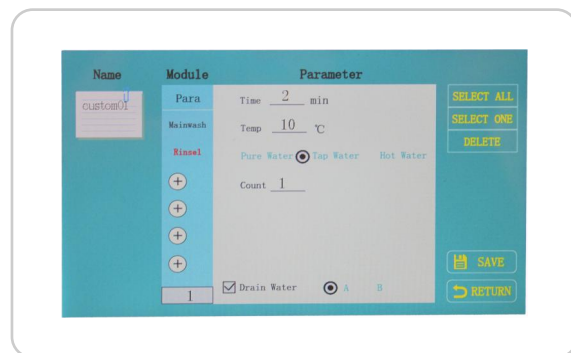
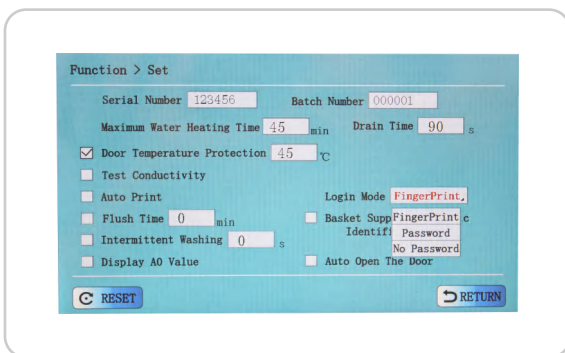
1. Advanced Microcomputer control system with full color LCD touch screen:

Graphical and digital display of real-time water inflow, cleaning procedures, cleaning stages, columnar changes in time and temperature, pipeline pressure data and other parameters.

System software can be redesigned to meet customer needs, and it can support the expansion of hundreds of applications.

The desktop can be configured to set up quick launch programs.

Three optional password protection can be set: Finger Print; Password; No password.



2. Advanced water spray technology

Pressure pipeline detection : it uses pressure detection sensors to real-time monitor the pressure of the cleaning water pipeline. When the water pressure is too low, it pauses the operation of the water pump to prevent it from running dry.

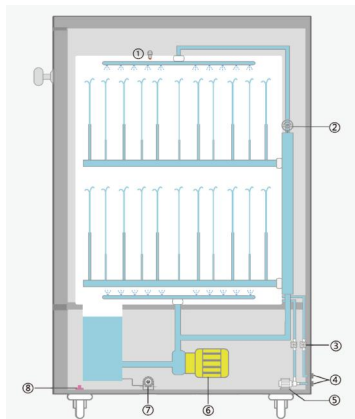
The circulating pump adopts soft start variable frequency control to avoid the damage caused by excessive water column pressure to glassware during the instantaneous start of the pump.

Two parallel water inlets at the back ensure uniform pressure distribution for each shelf and every spray nozzle.

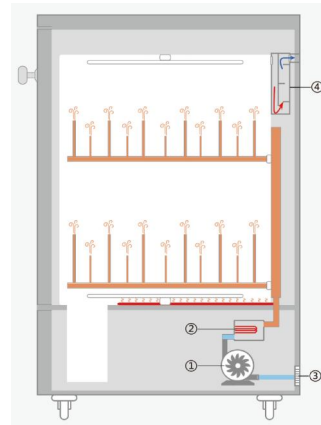
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- ① Speed Sensor for Spray
- ② Water Pressure Sensor
- ③ Flow Meter
- ④ Water Inlet Solenoid Valve
- ⑤ Pure Water Pump
- ⑥ Tap Water Pump
- ⑦ Thermostat Knob
- ⑧ Water Immersion Sensor



- ① Fan
- ② Heating pipe
- ③ Air filter
- ④ Heat Exchanger

3.Modular Design of FL-EXCH Racks

Each 1/2 module can be interchanged horizontally and vertically.

The racks adopts a quick-insert design, making installation simple and concise.



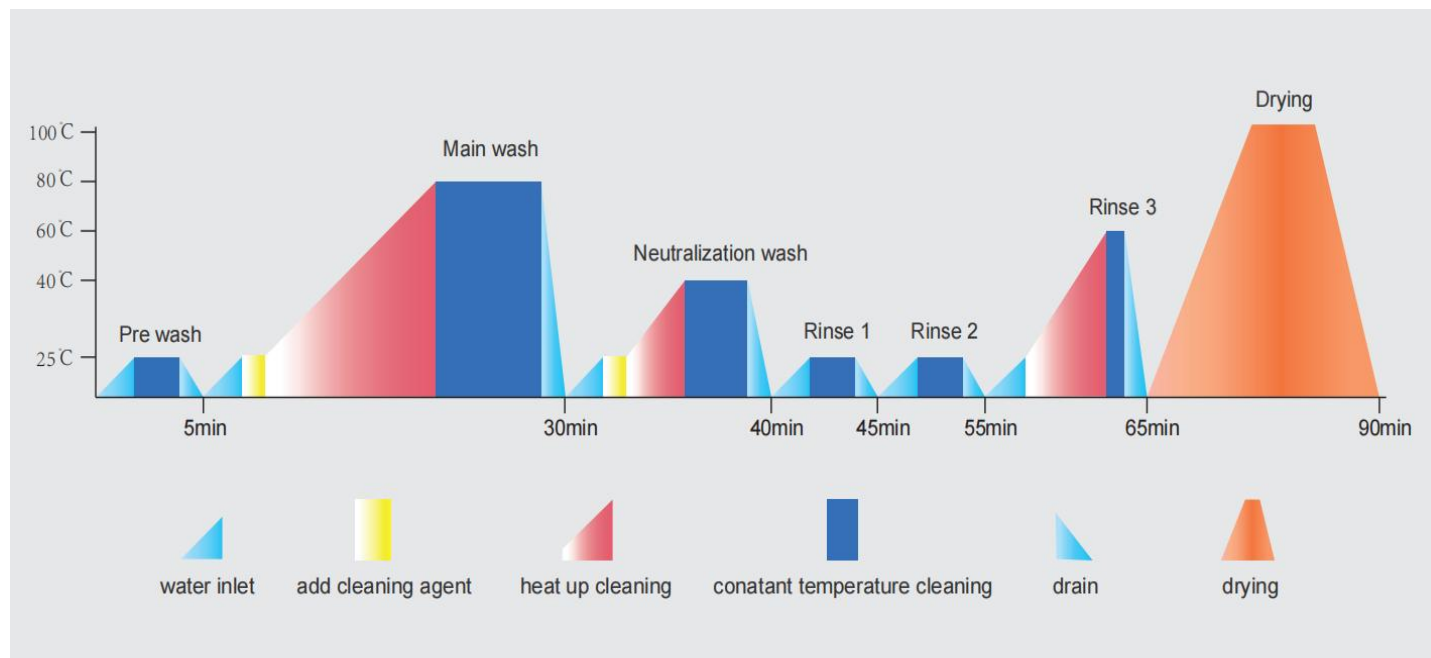
4.Safety

Laboratory glassware washers help ensure the safety of laboratory personnel by eliminating the need for manual washing, which can be time-consuming and potentially hazardous. The automated cleaning process reduces the risk of injury from broken glassware or exposure to harmful substances.

Water heating over-temperature protection, hot air heating over-temperature protection, water pump over-temperature protection, fan over-temperature protection.

Electronic security lock, EULA electric door switch technology, the experimenter can set the door opening temperature limit.

Cleaning Chart Flow



Cleaning Process Parameters

Model	Time(min)	Temp(C)	Alkaline (ml)	Acid(ml)	Water source
Pre-wash	2	10	0	0	tap water
Main wash	15	70	50	0	tap water
Neutralization	3	40	0	50	tap water
Rinse 1	1	10	0	0	tap water
Rinse 2	1	10	0	0	purified water
Rinse 3	1	60	0	0	purified water
Drying	5	100	0	0	/

WD-160: Small size, it can be placed under the bench or on the bench, it is an economical and practical lab washer. (commonly used cleaning racks: 1 unit XC-03+1 unit PLYT-21+1unit PLWT-32)

WD-190: Small size, large cleaning volume, the drying function can select (commonly used cleaning racks: 1 unit SC-01 and 1 unit XC-03+2 units PLYT-21 and 2 units PLWT-32)

WD-230/WD-230H: High-throughput cleaning while occupying a smaller footprint (commonly used cleaning racks: 1 unit SC-01 and 1 unit XC-03+2 units PLYT-21 and 2 units PLWT-32)

WD-320I/WD-320H: Large cleaning volume, it can place 3 layers of cleaning basket (commonly used cleaning racks: 2 units SC-01 and 1 unit XC-03+3 units PLYT-21 and 3 units PLWT-32)

WD-680: Simen control system, it can place 6 layers of cleaning basket. (commonly used cleaning racks: 4 units SC-01 and 2 units XC-03+ 6 units PLYT-21 and 6 units PLWT-32)

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Specification

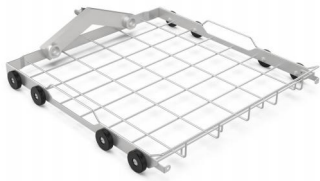
Model	WD-160	WD-190	WD-230	WD-230H	WD-320I	WD-320H	WD-680	
Capacity(L)	158L	185L	223L	223L	317L	317L	680L	
Display	8.8inch LCD Touch screen		7inch LCD Touch screen					
Standard Program	30	30	30	30	30	30	10	
Self-defined Program	120	120	120	120	120	120	10	
Searchable Data Files	Cleaning program files; Cleaning record files; Monitor files							
Storage	No	SD card(32G)					SD card and USB disk (32G)	
Permission Management System	Three level						Four Level	
Printer	No	Printer interface Built in printer						
Drying	Drying System	No	Double spray and heat exchange system with air inlet HEPA filter					
	Drying Time Range	No	0 to 300mins					
	Drying Temp Range	No	RT to 120 C					
Water Inlet pipe	Drying Method	Chamber forced air drying	Hot air injection via sprinkler (Circulation of hot air is not less than 110 m³/h)					
	Quantity	2						
Water Pump	Length	Standard: 2m (Customizable)						
	Material	PVC						
	Brand	Sweden						
Consumption	Flow Rate	0-400L /min	0-500L/min	0-600L/min	0-600L/min	0-800L /min	0-800L/min	0-1600L /min
	Consumption	0.37kW	0.75kW	0.75kW	0.75kW	1.5kW	1.5kW	
Pipeline Pressure Monitoring	No	Yes						
Structure Material	External	304 stainless steel						
	Cleaning Chamber	316 stainless steel						
	Door	Automatic multi-touch intelligent door. In standby mode, there is a gap between the front door and the cavity to facilitate water vapor evaporation. Automatically locks when cleaning starts.						
Caster	Four universal casters at the bottom of the instrument for easy movement							
Cleaning Rack	1 layer	2 layer	2 layer	2 layer	3 layer	3 layer	6 layer	
Air Heating Consumption	0.5kW	3kW	3kW	3kW	4kW	4kW	8kW	
Power Supply	220/110V,50/60Hz			380/220V,50/60Hz	220/110V,50/60Hz	380/220V,50/60Hz		
Total Consumption	5kW	5kW	5kW	10kW	5kW	10kW	21kW	
External Size(W×D×H)(mm)	640x726x778	670×691×940	670×760×1400		670×757×1650		1560×790×1980	
Shipping Size(W×D×H)(mm)	970x840X1350	990x860x1370	930x820x1620		890x880x1800		1680x910x2100	
N.W./G.W. (kg)	135/150	135/160	200/230		240/270		630/750	



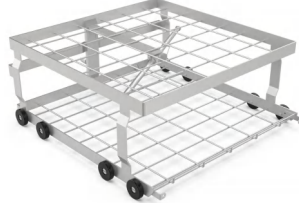
Optional Accessories: Cleaning Rack for Glassware Washer

(All seven models mentioned above are compatible.)

Cleaning Rack for Glassware



XC-03 Lower Cleaning Rack
Without spray arm, place the module cleaning basket



XC-06 Lower Cleaning Rack
With spray arm, place the module cleaning basket



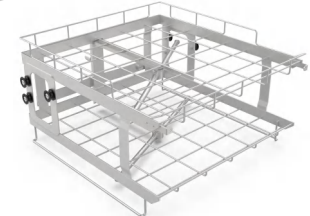
XC-08 Lower Cleaning Rack
Without spray arm, place K-03 module basket



SC-01 Upper/Middle Cleaning Rack
Without spray arm, place the module cleaning basket



SC-02 Upper/Middle Cleaning Rack
With spray arm, place the module cleaning basket



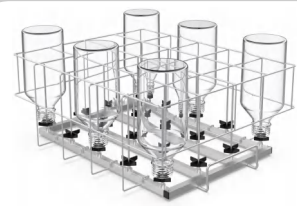
SC-05 Upper/Middle Cleaning Rack
With spray arm, place the module cleaning basket



SC-07 Upper Cleaning Rack
With spray arm, place K-03 module basket



PLYT-08 8-Position Spray Bottle Module Basket
Bottle volume: 250 - 2000ml
Clean blue cap bottle, erlenmeyer flask, volumetric flask, triangular flask, etc. With three-petal flower basket bottle holder and cross bottle holder



PLYT-20 20-Position Sampling Bottle Basket
Bottle volume: 1000ml with cross bottle holder. Each layer place one basket of sampling bottle of 1000ml. Each module can clean 20 sampling bottle of 1000ml.



PLYT-21 21-Position Spray Bottle Module Basket
Bottle volume: 50 - 250ml
Clean blue cap bottle, erlenmeyer flask, volumetric flask, triangular flask, etc. With three-petal flower basket bottle holder and cross bottle holder



PLYT-25 25-Position Sampling Bottle Basket
Bottle volume: 500ml with cross bottle holder. Each layer place one basket of sampling bottle of 500ml. Each module can clean 25 sampling bottle of 500ml.



PLYT-32 32-Position Spray bottle Module Basket
Bottle volume: 50 - 250ml
Clean volumetric flasks, triangular flasks, flasks, etc. With three-petal flower basket bottle holder and cross bottle holder. Each module can clean 32 volumetric flasks of 100ml



PLYT-50 50-Position Spray Bottle Module
Bottle volume: 10 - 100ml
Clean erlenmeyer flask, volumetric flask, triangular flask, flask, etc. With three-petal flower basket bottle holder and cross bottle holder. Each module can clean 50 volumetric flasks of 50ml



PLYT-66 66-Position Spray Bottle Module
Bottle volume: 10 - 50ml
Clean erlenmeyer flask, volumetric flask, triangular flask, flask, etc with three-petal flower basket bottle holder and cross bottle holder. Each module can clean 66 volumetric flasks of 25ml



PLWT-66 66-Position Spray Bottle Module
Bottle size: 10 - 50ml
Clean erlenmeyer flask, volumetric flask, triangular flask, flask, etc with cross bottle holder.

Optional Accessories: Cleaning Rack for Glassware Washer

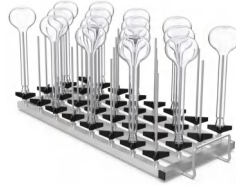


(All seven models mentioned above are compatible.)

Cleaning Rack for Glassware



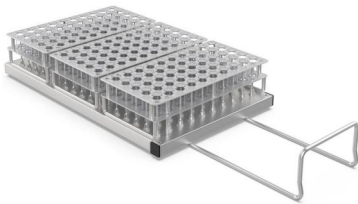
PLWT-50 50-Position Spray Bottle Module
 Bottle volume: 10 - 100ml
 Clean erlenmeyer flask, volumetric flask, triangular flask, flask, etc with cross bottle holder.
 Each module can clean 50 volumetric flasks of 50ml



PLWT-32 32-Position Spray Bottle Module Basket
 Bottle volume: 50 - 250ml
 Clean conical flasks, volumetric flasks, triangular flasks, flasks, etc with cross bottle holder.
 Each module can clean 32 volumetric flasks of 100ml



PL-66-2 66-Position Spray Bottle Module
 Pipette module 66 positions
 Bottle size: 0.1 ~ 50ml
 Designed according to pipette, each module can wash 66 pipettes.



PL-150 150-Position Injection Bottle Module
 Bottle volume: 2ml
 Clean chromatography injection bottle



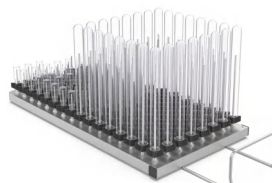
MX-48-1 48-Position Hybrid Module
 Bottle volume: 0.1 - 100ml
 MX-48-1 used to clean 24 pipettes and 24 of 100ml volumetric flasks
 MX-48-2 used to clean 24 injection bottles and 24 volumetric flasks of 100ml



MX-74-1 74-Position Hybrid Module
 Bottle volume: 2-100ml
 MX-74-1 used to clean 50 injection bottles and 24 volumetric flasks of 100ml
 MX-74-2 used to clean 50 pipettes and 24 volumetric flasks of 100ml



MX-102-1 102 Positions Hybrid Module
 Bottle volume: 0.1-50ml
 MX-102-1 used to clean 78 injection bottles and 24 pipettes
 MX-102-2 used to clean 78 injection bottles and 24 test tubes



MX-102-4 102-Position Hybrid Module
 Hybrid module 102 positions
 Bottle size: 0.1 ~ 50ml
 MX-102-4 used to clean 54 injection bottles and 48 test tubes



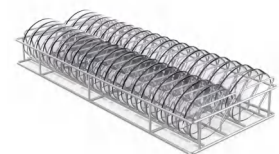
K-02 Large Quantity Cleaning Frame Mmodule
 Bottle volume: 10 - 2000ml
 Clean jars, glass rods, bottle caps
 Two 1/2 modules form a layer of cleaning basket



K-03 1/4 Fan-shaped Test Tube Cleaning Basket
 Bottle volume: 10 - 20ml
 Clean test tubes, centrifuge tubes, etc.
 Four 1/4 modules form a layer of cleaning basket



K-04 1/4 Fan-shaped Test Tube Cleaning Basket
 Bottle volume: 10 - 20ml
 Clean test tubes, centrifuge tubes, etc.
 Four 1/4 modules form a layer of cleaning basket



K-30 30-Position 1/2 Cleaning Basket Module
 Bottle volume: petri dish with a diameter of 60~150mm.
 Each module can wash 30 petri dishes of 90mm.
 Two 1/2 modules form a layer of cleaning basket.

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Humanized Operating System

- The man-machine interface features a 7-inch color LCD touchscreen (WD-60 is 4.3 inch) , enabling intuitive touch operation within the visual field for convenient operation. It includes pressure sensing, making it well-suited for complex operating environments.
- The PLC programmable micro-computer operating system ensures stable and reliable performance. It is designed to be anti-magnetic and resistant to breakdowns.

Standardized Cleaning

- Dual Peristaltic Pumps: Disinfection effectiveness mainly depends on the correct performance of the washing phases and the neutralization of the treated material. Creatrust washers come equipped with two peristaltic pumps: one dedicated to dispensing the alkaline detergent during the cleaning phase and the other for dispensing the acid neutralizer during the neutralization phase.
- By controlling the cleaning process and monitoring key cleaning parameters through automatic program flow control, the automation and standardization of vessel cleaning can be achieved;
- Equipped with two water inlets controlled by electromagnetic valves, users have the option to select between tap water and purified water during the wash and rinse phases
- The 360° spray mechanism ensures comprehensive internal and external cleaning of the container, eliminating dead spots and ensuring optimal cleaning effectiveness.
- The pure water inlet features an integrated booster pump, enabling direct suction of purified water without the need for an external booster
- Consistency is maintained across different batches, as well as within each batch, ensuring the cleaning effect at every point remains uniform
- Enables traceability management of cleaning data for enhanced record-keeping and accountability.

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Filter System

Equipped with dual stainless steel filters to safeguard the recirculation and drainage systems. These filters can be effortlessly removed for cleaning. Additional filters are installed on all incoming water lines and air intakes to ensure debris is pumped out effectively.

Water Conductivity Monitoring(Optional Accessories)

Water Conductivity Monitoring: The sensor gauges the concentration of dissolved inorganics, such as calcium and ferrous ions, in the tank water. This provides validation of water cleanliness, hardness, and rinsing thoroughness, while also confirming the proper dispensing of detergent, rinse aid, and purified water (Kindly note the WD-60 couldn't add Water Conductivity Monitoring)

Drying System (Except for WD-60 and WD-200I)

- The forced-air "Drying System"

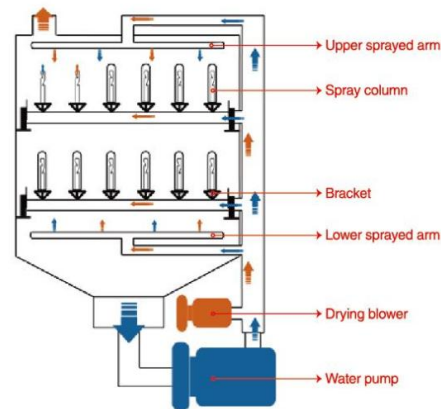
Comprised of an efficient hot air generator and a powerful fan, the system is directly managed by the programmer, enabling control over both operating time and temperature parameters. The microprocessor PLC system ensures intelligent management of the drying circuit, automatically adjusting the fan speed (thereby reducing power consumption) based on the temperature measured in the washing chamber. The efficient hot air temperature can be adjusted up to 120, enhancing the washing, rinsing, and sanitizing of glassware, as well as enabling faster drying.

- Patented TWINs System for Drying

The patented TWINs system integrates hot air with cleaning pipes, ensuring hot air reaches every corner with a 360-degree radius and no dead ends. It achieves synchronous drying of utensils and the circulation pipeline, preventing long-term moisture that can lead to bacterial growth within the pipeline.



Washing & Drying Cycle



Safety

- Three-level password protection to meet different management needs and prevent unauthorized access.
- Memory function for parameter settings in case of power failure, ensuring washer cycles resume automatically when power is restored.

Safety protection for water temperature and dry air temperature, with the unit automatically shutting down when the temperature exceeds the set limit.

- Electromagnetic release safety lock to prevent door opening during the wash/dry cycle.
- Safety electrical system with protection against circuit overload, short circuit, over current, and leakage current.
- Safety emergency button to stop the unit promptly in case of an emergency.
- Door design with anti-fall and anti-rebound features, capable of being stopped at any angle from 0 to 90 degrees after opening.
- Alarm system including alerts for circulating pump overheating, abnormal water heating, abnormal air heating, cleaning agent shortage, door not closed, abnormal water intake, and over-low alarms.
- USB port for exporting all data related to completed washing and disinfection programs.

Standard Cleaning racks

- WD-60: can choose any one unit cleaning rack from B series as standard configuration
- WD-120: with one unit CWIR36 cleaning rack as standard configuration
- WD-200: with two units CWIR36 cleaning rack as standard configuration
- WD-200I: with two units CWIR36A cleaning rack as standard configuration
- WD-220: with two units CWIR36 cleaning rack as standard configuration
- WD-320:with three units CWIR36 cleaning rack as standard configuration



Specification

Model	WD-60	WD-120	WD-200I	
Capacity(L)	90	120	200	
Display	4.3 inch LCD touch screen	7inch LCD touch screen		
Standard Program	3	12 (can free upgrade to 40 units)		
Self-defined Program	0	99 (can free upgrade to 200 units)		
Data Files	Cleaning program files, cleaning record files, Monitor files			
Storage	Yes			
Permission management system	Three level			
Printer	No, with USB interface			
Drying	Drying system	Heat exchange system		
	Drying Time Range	No	0 to 30 mins	No
	Drying Temp Range		RT to 120℃	
	Drying Method	Chamber natural drying	Hot air injection via prinikler	Chamber natural drying
Water inlet pipe	Quantity	2		
	Length	3m		
	Material	PVC		
	Flow Rate	0-150L/min	0-430L/min	0-430L/min
	Consumption	0.25kW	0.4kW	0.75kW
Pipeline Pressure Monitoring	No	Yes		
Structure	Material	304 stainless steel		
	External	316 stainless steel		
	Cleaning chamber	316 stainless steel		
	Door	Dual-Point Electronic Control Door Lock		
	Foot	No casters	Four universal casters	
Cleaning Layer	1 layer	1 layer	2 layer	
Air Heating	0kW	3kW	0kW	
Power Supply	220/110V,50/60Hz			
Consumption	3.5kW	6kW	4kW	
Internal Size(W×D×H)(mm)	470x462x422	600x629x539	526×542×645	
External Size(W×D×H)(mm)	529x648x650	980x740x870	607×840×1050	
Shipping size(W×D×H)(mm)	790x660x890	1110×940×1075	980×720×1270	
N.W./G.W. (kg)	65/104	169/200	125/165	

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Specification

Model	WD-200	WD-220	WD-320	
Capacity(L)	200	220	320	
Display	7inch LCD touch screen			
Standard Program	12 (can free upgrade to 40 units)			
Self-defined Program	99 (can free upgrade to 200 units)			
Data Files	Cleaning program files, cleaning record files, Monitor files			
Storage	Yes			
Permission management system	Three level			
Printer	No, with USB interface			
Drying	Drying system	Heat exchange system		
	Drying Time Range	0 to 30 mins		
	Drying Temp Range	RT to 120 C		
	Drying Method	Hot air injection via Sprinkler		
Water inlet pipe	Quantity	2		
	Length	3m		
Pipeline Pressure Monitoring	Material	PVC		
	Flow Rate	0-800L/min	0-800L/min	0-1000L/min
	Consumption	0.4kW	1.5kW	1.5kW
	Yes	Yes		
Structure	Material External	304 stainless steel		
	Cleaning chamber	316 stainless steel		
	Door	Dual-Point Electronic Control Door Lock		
	Foot	Four universal casters		
Cleaning Layer	2 layer	2 layer	3 layer	
Air Heating	3kW	3.6kW	3.6kW	
Power Supply	380/220V,110V, 50/60Hz			
Consumption	6kW	6kW/16kW	7kW/17kW	
Internal Size(W×D×H)(mm)	600×629×679	600×629×754	600×629×915	
External Size(W×D×H)(mm)	990×740×1145	690×790×1825	690×790×1985	
Shipping size(W×D×H)(mm)	1110×940×1345	810×990×2015	810×990×2185	
N.W./G.W. (kg)	193/260	220/300	237/320	