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GLASSWARE WASHERS

FULL-AUTOMATIC
CLEANING, DISINFECTION AND DRYING MACHINE

Infitek

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GLASSWARE WASHERS

It can clean, disinfect and dry laboratory glassware of various shapes and materials such as glass, ceramics, metal and plastic, including beakers, flasks, Petri dishes, burettes , pipettes, measuring cylinders, measuring cups, test tubes, conical bottles, spherical bottles, gas or liquid chromatography sample bottle, colorimetric tube, centrifugal tube, slide, separatory funnel, rubber tube, etc.

LWD-120 LWD -220 LWD-320 LWD-420M

Automatic Glassware Washer

LWD-120

The lab glassware washers integrate programmed cleaning, disinfecting and drying functions to clean all glassware stuff, for beaker, flask, pipette, petri dish, burette, measuring cylinder, test tube etc.
1. Interior work area: 90/120/200/220/320/420stainless Steel
2. Exterior body : #304 stainless steel
3. Washer trolley:#304 stainless steel and optional for : #316L stainless Steel

Standard Washing Procedure (can be self-designed by the user):
Pre-cleaning→Washing with cleaner→Rinse→Washing with neutralization→Rinse→Washing with hot water→Drying

Microprocessor Control System

7" LCD display touch screen, microprocessor with PLC system which is various of programmable washer cycles, detergent volume etc. User programmable with 99 storable programs and denable. All significant parameters can be set. These include: execution times, operating temperatures, quantity of additives, number of phases, and so on. Access to the control operations is protected by a system of four user passwords.

Specifications

Parameter	LWD-120
Capacity(L)	120
Voltage(V/HZ)	220V~240V, 50~60HZ
Washer Load Level	1
Water Wash Power(KW)	1.1
Water Heater Power(KW)	5
Dry Power(KW)	2.1
MAX. Power(KW)	6
Water Consumption/Cycle(L)	15
Tank internal temperature (℃)	0~99
Noise(dBa)	<50
Water Supply Pressure (Mpa)	0.3-1.0
Chamber Dimension W*D*H,mm)	600*629*465
Exterior Dimension (W*D*H,mm)	980*740*830
Package dimension (W*D*Hmm)	1080*990*1065
Net/Gross Weight (KG)	130/150

Reliability

Microprocessor with PLC control system anti-EMI (electrical magnetic interface)

7" colorful touch screen is easy control and observation, It display the work situation.

Password protection with three levels can meet different management needs which block the authorized entry

Parameters setting memory for Power failure, washer cycles is going on as soon as power comes back

Safety protection water temperature and dry air temperature, when the temperature exceed the setting, it will stop working

Safety lock with electromagnetic release to prevent door opening while it is in wash/dry cycle

Safety electrical system for circuit overload, short circuit, over current and leakage current safety emergency button for stop the unit in time

Alarm system: drainage malfunction alarm, detergent/neutralizer shortage alarm, high water heating alarm etc

Optional Accessories

◆ Optional Water Conductivity Monitoring
Sensor measures the level of dissolved inorganics such as calcium and ferrous ions in the tank water, providing validation of water cleanliness, hardness and rinsing thoroughness. commons that detergent, rinse aid and puried water have been properly dispensed.

◆ Optional Printer
The traceability of the washing and thermal disinfection cycles performed in professional glassware washers is required in order to check the operations have been successfully completed. The printer is an accessory which can provide a detailed report.

Automatic Glassware Washer

LWD-200

Specifications

Parameter	LWD-200
The volume of the cleaning chamber	≥200L
Dimensions	980*740*1100
Power supply (V/HZ)	220V/50Hz
Water cleaning power	≤0.75KW
water heating power	≥5KW fast heating
drying power	≥2.1KW
air volume	≥120L/M3
Water temperature control	room temperature to 99℃
Configure 2 cleaning racks	
Equipped with imported one barrel of cleaning liquid and one barrel of neutralizing liquid.	

1. General requirements

1.1 The spraying of cleaning water and the dissolution and stripping of cleaning solution can assist in cleaning the inorganic residues (such as lead, mercury, cadmium, arsenic, etc.) and organic residues (such as industrial dyes, hormones, grease, dust, etc.) of laboratory glassware or plastics. After cleaning, the samples can be dried.

*1.2 The organic residue after cleaning is less than 0.1mg/L, and the metal ion residue is less than 0.02mg/L. The provincial authoritative experimental report or certification on the cleaning effect must be provided. In order to ensure the accuracy of the experimental results of trace analysis, the equipment has passed ISO9001, CE and other relevant international authoritative certifications.

1.3 The power supply voltage is 220V.

2. Structural design

2.1 Double-layer detachable heat insulation and sound insulation shell, the inner cavity is made of 316L stainless steel, and the outer shell is made of 304 stainless steel. The visible parts of the box and door should not have exposed screws and rivets to avoid rust in a humid environment.

* 2.2 The whole machine is of horizontal design. The height of the equipment is 1.1 meters, which is basically flush with the test bench, and the upper part is convenient for placing light weight items.

*2.3 There are two layers of cleaning racks in the cleaning cabin; the maximum cleaning height of the lower cleaning racks is 23cm, and the maximum cleaning height of the upper layer is 18cm.The maximum cleaning capacity is to clean 520 2ml liquid phase bottles or 120 vessels (volume flasks, conical flasks, etc.) with a diameter of 7 cm at a time.

*2.4 The original double-layer vacuum glass door is adopted, which can clearly see the internal cleaning, effectively heat insulation and reduce energy consumption.

2.5 It has two water inlets, which can be connected to tap water and pure water at the same time, and which water needs to be entered can be selected through the operation of the control panel.

3. Control system

*3.1 The industrial PLC microcomputer control system is adopted, without ordinary circuit board and single-chip microcomputer control. Industrial PLC is a professional microcomputer, which has special standards and designs for waterproof, anti-electricity, anti-magnetic, etc., and can directly upgrade the control software without changing the circuit, which is easy to upgrade.

*3.2 The control system adopts 7-inch color LCD touch screen, full Chinese operation interface, and Chinese prompts for operation and alarms.

*3.3 The control system has 12 standard cleaning procedures and 99 custom cleaning procedures, which can be set and adjusted for different utensils and requirements.

3.4 The control system adopts three-level password setting, which is convenient for management and operators of different levels to set and manage the parameters.

4. Cleaning system

*4.1 The cleaning water pump is a professional European original imported circulating pump. Its water output is 800L/min, the water output is large, and the scouring force is large. The circulating pump fan blades have been treated with high temperature resistance and can work normally under the disinfection water temperature (above 93 ℃).

*4.2 The washing cabin adopts two parallel water supply, and the side accepts water structure. The structure that the top part receives water and the central part all the way to supply water is not used.The two channels provide water at the same time, reducing the water pressure loss of the one channel of water supply, so that the upper and lower layers have the same water output; Receiving water on the side part, and there is no need to find a water receiving port. It is easy to operate, and the connector is not easy to damage.

*4.3 Both cleaning racks adopt side water inlet and central water outlet structure. The water is discharged from the middle part, and the washing rack connects the water to the middle and distributes the water evenly to each spray column to ensure that each spray column discharges water evenly and the effect of cleaning utensils is consistent.

*4.4 The spray columns of the cleaning rack shall be distributed in parallel rather than around the center, so as to ensure the consistent distance between each spray column and facilitate the placement and estimation of utensils while increasing the cleaning amount.

*4.5 The cleaning rack does not have a tall central water inlet pipe, which saves space and is convenient to place; the upper and lower floors of the cleaning rack can be interchanged to facilitate the arrangement of utensils.

*4.6 The cleaning cabin has a built-in double-layer 360-degree rotating spray arm, and the nozzle adopts a fan-shaped nozzle design, which sprays a fan-shaped water curtain with large scouring force and no dead ends. No simple small hole nozzle is used to reduce the dead angle of external spraying.

4.7 The glassware washer adopts an automatic heating system during cleaning, and the heating temperature is adjustable. The maximum temperature can reach 93°C, reaching the disinfection level.

4.8 The cleaning solution and neutralization solution are automatically added by two peristaltic pumps, and the added dosage can be set.

5. Drying system

*5.1 Injection hot-air drying. The filtered air is heated and directly connected to the spray pipe. The air temperature can be adjusted from room temperature to 120°C. The hot air will not only dry the utensils but also dry the pipe at the same time to prevent internal water accumulation.

5.2 The dry air passes through a high-efficiency filter with an efficiency of 99.99% to ensure that the air entering the cleaning cabin is clean and avoiding secondary pollution of the cleaning items.

*5.3 With filter alarm function, it can automatically determine whether the filter needs to be replaced. No matter the filter expires or is accidentally damaged, an alarm will be issued and a Chinese prompt will be given.

5.4 Equipped with dual steam condensing devices to prevent the discharge of hot steam into the laboratory during work from polluting the experimental environment.

5.5 The internal and external balance air pressure hole design makes it unnecessary to circulate and supplement the internal humid air during drying, effectively shortening the drying time.

6. Safety protection

6.1 Safe door lock design, the door body is locked and cannot be opened during the cleaning process, preventing water spraying and scalding caused by misoperation;It has the function of the emergency door opening, which can quickly open the door and take out the utensils after power failure.

6.2 The door lock adopts the upper two-point locking structure. The left and right sides of the upper door body are connected to the door frame for locking. Compared with the single-point door lock connected in the middle, the seal is more reliable and prevents water and steam from overflowing.

6.3 It has a complete protection function, with a lack of cleaning agent alarm, the main washing pump over-temperature protection function, heating and anti-dry function, the main washing pump idling protection function, water level sensor detection function, cleaning chamber over-temperature protection function, all have Chinese prompt and alarm reminder.

6.4 It has the function of program self-checking and equipment self-cleaning, which can perform self-checking on the set program. After cleaning, the equipment can also be automatically cleaned to reduce residues.

Automatic Glassware Washer

LWD-200I

Specifications

Parameter	LWD-200I
The volume of the cleaning chamber	≥200L
External Dimensions	607×730×1050
Power Supply (V/HZ)	220V/50Hz
Water Cleaning power	≥0.75KW
water Heating power	≥3KW, fast heating
Drying Power	≥2.1KW
Air Volume	≥120L/M3
Water Temperature Control	Room temperature to 99℃
Standard Configuration	2 cleaning racks
Equipped with 2.5L each of imported cleaning fluid and neutralizing fluid	

1. General requirements

1.1 The spraying of cleaning water and the dissolution and stripping of cleaning solution can assist in cleaning the inorganic residues (such as lead, mercury, cadmium, arsenic, etc.) and organic residues (such as industrial dyes, hormones, grease, dust, etc.) of laboratory glassware or plastics.

1.2 The organic residue after cleaning is less than 0.1mg/L, and the metal ion residue is less than 0.02mg/L. The provincial authoritative experimental report or certification on the cleaning effect must be provided. In order to ensure the accuracy of the experimental results of trace analysis, the equipment has passed ISO9001, CE and other relevant international authoritative certifications.

1.3 The power supply voltage is 220V.

2. Structural design

2.1 Double-layer detachable heat insulation and sound insulation shell, the inner cavity is made of 316L stainless steel, and the outer shell is made of 304 stainless steel.There are no exposed screws and rivets on the outside.

2.2 The height of the equipment is 110cm, which can be embedded in the test bench, the length and width are less than 75cm, and it occupies a small area.

2.3 There are two layers of cleaning racks in the cleaning cabin, which can clean 420 liquid phase autosampler vials or test tubes, colorimetric tubes or 72 volumetric flasks, beakers, conical flasks, etc. at a time.

2.4 Internal foaming double-layer metal door is adopted to effectively insulate and reduce energy consumption.

2.5 It has two water inlets, which can be connected to tap water and pure water at the same time, and which water needs to be entered can be selected through the operation of the control panel.

Automatic Glassware Washer

LWD-200I

3. Control system

3.1 Microcomputer control system and color LCD screen are adopted. The tilt angle design of the operation screen conforms to the principle of ergonomics. It is easy to operate and has better user experience.

3.2 The control screen has a full Chinese operation interface, and both operations and alarms are prompted in Chinese.

3.3 The control system has 12 standard cleaning procedures and 99 custom cleaning procedures, which can be set and adjusted for different utensils and requirements.

3.4 “Black box” function, built-in data memory, the whole process of recording the cleaning status of each step, the system has self-diagnosis function, fault information prompt function;

4. Safety protection

5.1 Safe door lock design, the door body is locked and cannot be opened during the cleaning process, preventing water spraying and scalding caused by misoperation; It has the function of emergency door opening, which can quickly open the door and take out the utensils after power failure.

5.2 It has a complete protection function, with a lack of cleaning agent alarm, the main washing pump over-temperature protection function, heating and anti-dry function, the main washing pump idling protection function, water level sensor detection function, cleaning chamber over-temperature protection function, all have Chinese prompt and alarm reminder.

5.3 It has the function of program self-checking and equipment self-cleaning, which can perform self-checking on the set program. After cleaning, the equipment can also be automatically cleaned to reduce residues.

5. Cleaning system

4.1 The cleaning water pump is a professional European original imported circulating pump. Its water output is 800L/min, the water output is large, and the scouring force is large. The circulating pump fan blades have been treated with high temperature resistance and can work normally under the disinfection water temperature (above 93 ℃).

4.2 The cleaning cabin adopts the water supply structure of parallel water supply and water inlet at the back, instead of the structure of water inlet at the top and one-way water supply at the center. Water inlet from the side, and there is no need to find the water receiving port, convenient access, and the joint is not easy to be damaged.

4.3 The cleaning rack adopts the structure of water inlet in the back and water distribution in the central part. The central part divides water, and the cleaning rack connects the water to the middle part and distributes the water evenly to each spray column to ensure that each spray column discharges water evenly and cleans the utensils uniformly.

4.4 The spray columns of the cleaning rack shall be distributed in parallel rather than around the center, so as to ensure the consistent distance between each spray column and facilitate the placement and estimation of utensils while increasing the cleaning amount.

4.5 The cleaning rack does not have a tall central water inlet pipe, which saves space and is convenient to place; the upper and lower floors of the cleaning rack can be interchanged to facilitate the arrangement of utensils.

4.6 The cleaning cabin has a built-in double-layer 360-degree rotating spray arm, and the nozzle adopts a fan-shaped nozzle design, which sprays a fan-shaped water curtain with large scouring force and no dead ends. No simple small hole nozzle is used to reduce the dead angle of external spraying.

4.7 The glassware washer adopts an automatic heating system during cleaning, and the heating temperature is adjustable. The maximum temperature can reach 93ºC, reaching the disinfection level.

4.8 The cleaning solution and neutralization solution are automatically added by two peristaltic pumps, and the added dosage can be set.

Automatic Glassware Washer

LWD-220

The lab glassware washers integrate programmed cleaning, disinfecting and drying functions to clean all glassware stuff, for beaker, flask, pipette, petri dish, burette, measuring cylinder, test tube etc.

Interior work area: 90/120/200/220/320/420stainless Steel
Exterior body : #304 stainless steel
Washer trolley:#304 stainless steel and optional for :
#316L stainless Steel

Standard Washing Procedure (can be self-designed by the user):
Pre-cleaning→Washing with cleaner→Rinse→Washing with neutralization→Rinse→Washing with hot water→Drying

Microprocessor Control System

7" LCD display touch screen, microprocessor with PLC system which is various of programmable washer cycles, detergent volume etc. User programmable with 99 storable programs and denable. All significant parameters can be set. These include: execution times, operating temperatures, quantity of additives, number of phases, and so on. Access to the control operations is protected by a system of four user passwords.

Specifications

Parameter	LWD -220	
Capacity(L)	220	
Voltage(V/HZ)	220V~240V,50~60HZ	380V/50~60HZ
Washer Load Level	2	
Water Wash Power(KW)	1.5	
Water Heater Power(KW)	5	15
Dry Power(KW)	3.6	
MAX. Power(KW)	6.5	16.5
Water Consumption/Cycle(L)	15	
Tank internal temperature (℃)	0~99	
Noise(dBa)	<55	
Water Supply Pressure (Mpa)	0.3-1.0	
Chamber Dimension(W*D*H,mm)	600*629*658	
Exterior Dimension(W*D*H,mm)	690*790*1765	
Package dimension (W*D*Hmm)	990*840*2090	
Net/Gross Weight (KG)	220/300	

Reliability

Microprocessor with PLC control system anti-EMI (electrical magnetic interface)

7" colorful touch screen is easy control and observation, It display the work situation.

Password protection with three levels can meet different management needs which block the authorized entry

Parameters setting memory for Power failure, washer cycles is going on as soon as power comes back

Safety protection water temperature and dry air temperature, when the temperature exceed the setting, it will stop working

Safety lock with electromagnetic release to prevent door opening while it is in wash/dry cycle

Safety electrical system for circuit overload, short circuit, over current and leakage current safety emergency button for stop the unit in time

Alarm system: drainage malfunction alarm, detergent/neutralizer shortage alarm, high water heating alarm etc

Optional Accessories

◆ Optional Water Conductivity Monitoring
Sensor measures the level of dissolved inorganics such as calcium and ferrous ions in the tank water, providing validation of water cleanliness, hardness and rinsing thoroughness. commons that detergent, rinse aid and puried water have been properly dispensed.

◆ Optional Printer
The traceability of the washing and thermal disinfection cycles performed in professional glassware washers is required in order to check the operations have been successfully completed. The printer is an accessory which can provide a detailed report.

Automatic Glassware Washer

LWD-220S

Features

The lab glassware washers integrate programmed cleaning, disinfecting and drying functions to clean all glassware stuff, for beaker, flask, pipette, petri dish, burette, measuring cylinder, test tube etc.

Interior work area: 90/120/200/220/320/420stainless Steel
Exterior body : #304 stainless steel
Washer trolley:#304 stainless steel and optional for : #316L stainless Steel

Microprocessor Control System

7" LCD display touch screen, microprocessor with PLC system which is various of programmable washer cycles, detergent volume etc. User programmable with 99 storable programs and denable. All significant parameters can be set. These include: execution times, operating temperatures, quantity of additives, number of phases, and so on. Access to the control operations is protected by a system of four user passwords.

Specifications

Parameter	LWD -220S	
Capacity(L)	220	
Voltage(V/HZ)	220V~240V,50~60HZ	380V/50~60HZ
Washer Load Level	2	
Water Wash Power(KW)	1.5	
Water Heater Power(KW)	5	15
Dry Power(KW)	3.6	
MAX. Power(KW)	6.5	16.5
Water Consumption/Cycle(L)	15	
Tank internal temperature (C)	0~99	
Noise(dBa)	<55	
Water Supply Pressure (Mpa)	0.3-1.0	
Chamber Dimension(W*D*H,mm)	600*629*658	
Exterior Dimension(W*D*H,mm)	690*790*1765	
Package dimension (W*D*Hmm)	990*840*2090	
Net/Gross Weight (KG)	310/340	

Reliability

Microprocessor with PLC control system anti-EMI (electrical magnetic interface)

7" colorful touch screen is easy control and observation, It display the work situation.

Password protection with three levels can meet different management needs which block the authorized entry

Parameters setting memory for Power failure, washer cycles is going on as soon as power comes back

Safety protection water temperature and dry air temperature, when the temperature exceed the setting, it will stop working

Safety lock with electromagnetic release to prevent door opening while it is in wash/dry cycle

Safety electrical system for circuit overload, short circuit, over current and leakage current safety emergency button for stop the unit in time

Alarm system: drainage malfunction alarm, detergent/neutralizer shortage alarm, high water heating alarm etc

Optional Accessories

◆ Optional Water Conductivity Monitoring
Sensor measures the level of dissolved inorganics such as calcium and ferrous ions in the tank water, providing validation of water cleanliness, hardness and rinsing thoroughness. commons that detergent, rinse aid and puried water have been properly dispensed.

Standard Washing Procedure (can be self-designed by the user):
Pre-cleaning→Washing with cleaner→Rinse→Washing with neutralization→Rinse→Washing with hot water→Drying

Automatic Glassware Washer

LWD-320

The lab glassware washers integrate programmed cleaning, disinfecting and drying functions to clean all glassware stuff, for beaker, flask, pipette, petri dish, burette, measuring cylinder, test tube etc.

Interior work area: 90/120/200/220/320/420stainless Steel
Exterior body : #304 stainless steel
Washer trolley:#304 stainless steel and optional for :
#316L stainless Steel

Standard Washing Procedure (can be self-designed by the user):
Pre-cleaning→Washing with cleaner→Rinse→Washing with neutralization→Rinse→Washing with hot water→Drying

Microprocessor Control System

7" LCD display touch screen, microprocessor with PLC system which is various of programmable washer cycles, detergent volume etc. User programmable with 99 storable programs and denable. All significant parameters can be set. These include: execution times, operating temperatures, quantity of additives, number of phases, and so on. Access to the control operations is protected by a system of four user passwords.

Specifications

Parameter	LWD-320	
Capacity(L)	320	
Voltage(V/HZ)	220V~240V/50~60HZ	380V/50~60HZ
Washer Load Level	3	
Water Wash Power(KW)	1.5	2.8
Water Heater Power(KW)	5	15
Dry Power(KW)	3.6	
MAX. Power(KW)	6.5	18
Water Consumption/Cycle(L)	15	
Tank internal temperature (℃)	0~99	
Noise(dBa)	<55	
Water Supply Pressure (Mpa)	0.3-1.0	
Chamber Dimension(W*D*H,mm)	600*629*820	
Exterior Dimension(W*D*H,mm)	690*790*1905	
Package dimension (W*D*Hmm)	990*840*2250	
Net/Gross Weight (KG)	350/380	

Reliability

Microprocessor with PLC control system anti-EMI (electrical magnetic interface)

7" colorful touch screen is easy control and observation, It display the work situation.

Password protection with three levels can meet different management needs which block the authorized entry

Parameters setting memory for Power failure, washer cycles is going on as soon as power comes back

Safety protection water temperature and dry air temperature, when the temperature exceed the setting, it will stop working

Safety lock with electromagnetic release to prevent door opening while it is in wash/dry cycle

Safety electrical system for circuit overload, short circuit, over current and leakage current safety emergency button for stop the unit in time

Alarm system: drainage malfunction alarm, detergent/neutralizer shortage alarm, high water heating alarm etc

Optional Accessories

◆ Optional Water Conductivity Monitoring
Sensor measures the level of dissolved inorganics such as calcium and ferrous ions in the tank water, providing validation of water cleanliness, hardness and rinsing thoroughness. commons that detergent, rinse aid and puried water have been properly dispensed.

◆ Optional Printer
The traceability of the washing and thermal disinfection cycles performed in professional glassware washers is required in order to check the operations have been successfully completed. The printer is an accessory which can provide a detailed report.

Automatic Glassware Washer

LWD-420M

Features

The stainless steel interior, exterior, frame and plug-in can withstand heavy use and reduce the accumulation of corrosion and contaminants. Internal components, such as pumps and seals, are laboratory-grade and designed for long life.
1.Interior work area: 90/120/200/220/320/420 stainless Steel
2.Exterior body:#304 stainless steel
3.Washer trolley:#304 stainless steel and optional for : #316L stainless Steel

Specifications

Parameter	LWD-420M	
Capacity(L)	420	
Voltage(V/HZ)	380V/50~60HZ	220V~240V/50~60HZ
Washer Load Level	2	
Water Wash Power(KW)	2.8	
Water Heater Power(KW)	15	5
Dry Power(KW)	3.6	
MAX. Power(KW)	17	7
Water Consumption/Cycle(L)	25	
Tank internal temperature (C)	0~99	
Noise(dBa)	<60	
Water Supply Pressure (Mpa)	0.3-1.0	
Chamber Dimension(W*D*H,mm)	688*700*703	
Exterior Dimension(W*D*H,mm)	1100*900*2165	
Package dimension (W*D*Hmm)	1300*1040*2350	
Net/Gross Weight (KG)	380/420	

Reliability

Microprocessor with PLC control system anti-EMI (electrical magnetic interface)

7" colorful touch screen is easy control and observation, It display the work situation.

Password protection with three levels can meet different management needs which block the authorized entry

Parameters setting memory for Power failure, washer cycles is going on as soon as power comes back

Safety protection water temperature and dry air temperature, when the temperature exceed the setting, it will stop working

Safety lock with electromagnetic release to prevent door opening while it is in wash/dry cycle

Safety electrical system for circuit overload, short circuit, over current and leakage current safety emergency button for stop the unit in time

Alarm system: drainage malfunction alarm, detergent/neutralizer shortage alarm, high water heating alarm etc

Microprocessor Control System

7 inch LCD display touch screen, microprocessor with PLC system which is various of programmable washer cycles, detergent volume etc. User programmable with 99 storable programs and denable. All significant parameters can be set. These include: execution times, operating temperatures, quantity of additives, number of phases, and so on. Access to the control operations is protected by a system of four user password.

Standard Washing Procedure (can be self-designed by the user):
Pre-cleaning→Washing with cleaner→Rinse→Washing with neutralization→Rinse→Washing with hot water→Drying

Cleaning frame

Beaker cleaning rack

WR01-BK

Can clean all kinds of beakers.

WR80

It can clean 80 50ml beakers.

WR20-ST

Can clean diameter less than 8mm length less than 3 meters of 20 hose.

Petri dish cleaning rack

WR70-PDL

70 petri dishes with diameter less than 90mm (height less than 30mm) can be cleaned. This model is limited to the upper layer.

WR75-PDU

75 petri dishes with diameter less than 100mm (height less than 30mm) can be cleaned.This model is limited to lower layer.

WR40

It can clean 40 absorption bottles.

Pipette cleaning rack

WR60-TB

60-position pipette cleaning rack
It can clean 60 550mm straws, pipettes, etc.
It can clean some wide-mouth containers such as beakers.

Measuring cylinder cleaning rack

WR38

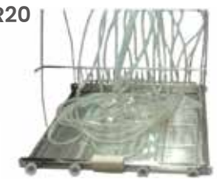
To simultaneously wash mearsure cylinder 16 ea of 5~25ml,12 ea of 50~250ml,6 ea of 500ml and 4 ea of 1000~2000ml

Standard type--injection cleaning rack

WR16

Corresponding vessels: custom fine mouth bottle cleaning rack

WR20



To wash 20ea of rubber tubes with its inner diameters 3~8mm and length less than 3mm

WR30

To wash Max. 30ea of 250ml infusion bottles and caps; or other volumetic flasks conical asks or beakers

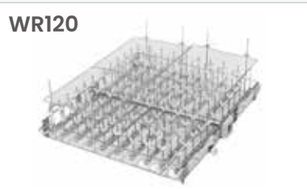
WR36

To wash Max.36ea of 10~250ml volumetric flasks, conical flasks or beekers(diameter within 90mm)

WR60

To wash Max.60ea of 10~250ml volumetric flasks, conical flasks or beekers(diameter within 60mm)

WR120



To wash 120 ea of centrifuge tubes , test tubes, 50ml volumetrics flask

WR222

222position of injection tubes and adjustable trolleies. It can wash 222ea of tubes or vials and capes.

WR260

260 washable injection vials

WRSI-220

Mixed type--injection cleaning rack

WR130

130 injection spray tubes and adjustable bracket, can clean 112-position chromatographic injection bottles,test tubes, etc., can clean 18-position 10-250ml volumetric flask, triangle flask. A beaker, etc.

Automatic Glassware Washer

LWD-60

- With safe door lock design
- Small and exquisite, light in weight
- Adopt microcomputer control system and color LCD screen

Description

- The glassware washer is known as the laboratory bottle washing machine (hereinafter referred to as the cleaning machine), which is applicable to washing conventional glassware in the laboratories of pharmaceutical, food and chemical enterprises, universities, scientific research institutions, and testing institutions, such as test tube, beaker, flask, graduated cylinder, pipette, petri dish, sample injection bottle, and conical flask.

Specifications

Model	LWD-60
Volume of cleaning chamber	90L
Dimension of the cleaning chamber(W×D×H)	470×462×422 mm
External dimensions (W×D×H)	529×648×650 mm
Electricity	220V/50Hz
Circulating pump power	0.25kW
Water heating power	3kW
Water temperature control	RT～99℃
Organic residues after cleaning	<0.1mg/L
Metal ion residues after cleaning	<0.02mg/L
Configuration	1 cleaning rack, the cleaning rack can be selected according to needs. Equipped with a barrel of imported cleaning liquid and a barrel of neutralizing liquid.

Features

Product function

- The automatic cleaning equipment uses high temperature and high pressure water to continuously spray the inner and outer surfaces of the vessels. It combines the role of cleaning fluid to clean the dirt inside and outside the utensils. And water intake, cleaning,and drainage are completed automatically, without manual intervention;
- Organic residues after cleaning <0.1mg/L, metal ion residues <0.02mg/L, provide the test report of the provincial inspection department on the cleaning effect and the electrical appliance safety inspection report of the provincial inspection department.

Structural design

- It is small and exquisite, light in weight, and can be easily lifted by two people; it is convenient to install, and users can install it by themselves, without the need for a dedicated person to install it.
- The equipment occupies a small area and is convenient to place. It can be placed on the laboratory bench or embedded in the laboratory bench for easy operation and suitable for placement in laboratories with tight space.
- The shell is SUS304L stainless steel, and the cleaning chamber is SUS316L stainless steel, which is corrosion-resistant and easy to clean. The cleaning chamber, the equipment shell and the door body have heat insulation and noise reduction layer, low noise, and more energy-saving.
- A layer of cleaning rack can be placed in the cleaning chamber, which can be used at any time to wash at any time, and 120 test tubes or liquid-phase bottles can be cleaned in a single time.
- Double water inlets at the bottom can be connected to tap water and pure water at the same time. The water inlet adopts a retracted design, which does not occupy the space behind the equipment and is convenient for equipment placement;The pure water pipe has a built-in booster pump, which can be directly connected to the pure water tank without additional boosting.

Control system

- Adopt microcomputer control system and color LCD screen. And the design of the tilt angle of the operation screen conforms to the principle of ergonomics. It has button operation and is easy to operate.
- The control screen has a full English operation interface, with English prompts for operation and alarms, simple operation, and three cleaning modes: fast, standard, and enhanced.The cleaning program eliminates the self-setting function, and the cleaning is more convenient.
- The cleaning parameters can be set according to the needs, and the cleaning time, water temperature, cleaning fluid dosage, etc. can be set.

Features

Cleaning system

- The cleaning water pump is a professional European original imported circulating pump, which has large flushing force, cleaner cleaning and less water consumption. The single circulating water volume is about 10L.
- The cleaning cabin adopts the water supply structure of parallel water supply and water inlet at the back, instead of the structure of water inlet at the top.The rear water supply, the cleaning rack is automatically coupled and connected,and there is no need to aim and dock. The connection is convenient, and it is not easy to be damaged.At the same time, the central top water pipe is eliminated, which is convenient for placing utensils.
- The cleaning rack adopts the structure of water inlet in the back and water distribution in the central part.The central part divides water, and distributes the water evenly to each spray column to ensure that each spray column discharges water evenly and cleans the utensils uniformly.
- The cleaning rack is elastically connected with the host, and the seal is better; the joint material is PTFE, which is corrosion-resistant, high-temperature resistant, and chemically more stable.
- The spray columns of the cleaning rack are distributed in parallel instead of the radial distribution around the center. The purpose is to ensure that the distance between each spray column is consistent, effectively increasing the cleaning volume, and also more convenient for the placement of the utensils and the calculation of the cleaning volume.
- The top and bottom of the cleaning chamber are equipped with rotating spray arms to clean the inner and outer surfaces of the vessels. The spray arms have three rotating arms, distributed in a fan shape, and spraying without dead ends.
- The cleaning and heating power is 3KW, the heating speed is fast, the fastest heating rate can reach 5℃ per minute; the heating temperature is adjustable, and the maximum temperature is 93 ℃, which can reach the disinfection level.

  4.8 The cleaning solution and neutralization solution are automatically added by two peristaltic pumps, and the added dosage can be set.

Safety protection

- Safe door lock design, the door body is locked and cannot be opened during the cleaning process, preventing water spraying and scalding caused by misoperation;It has the function of emergency door opening, which can quickly open the door and take out the utensils after power failure.
- It has complete protection functions, with alarm for lack of cleaning agent, door opening alarm, water overflow alarm, insufficient water inlet speed alarm, etc., with English prompts and alarm reminders.