Laboratory Glassware Washer

Features

- Microprocessor with PLC control system anti-EMI (electrical magnetic interface).
- 7" colorful touch screen is easy control and observation, and 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.
- The door is anti-fall and anti-rebound design, and can be stopped at any angle from 0 to 90 degrees after opening.
- Alarm system: circulating pump overheated, water heating abnormal, air heating abnormal, cleaning agent shortage, door is not closed, water intake abnormal, overflow alarm, etc.
- USB port for exporting all the data relative to completed washing and disinfection programs.
- Filter System: Two stainless steel filters protect re-circulation and drain pumps from debris;
- Dual Peristaltic Pumps (Detergent & Neutraliser): with two peristaltic pumps dedicated to dispensing the alkaline detergent during the cleaning phase and the acid neutralizer during the neutralization phase respectively.
- The patented TWINS drying system ensures 360° dead-angle-free hot air circulation, synchronously drying both utensils and pipelines to prevent bacterial growth caused by residual moisture.
- The forced-air drying system combines an intelligent PLC-controlled hot air generator and adjustable fan speed for rapid, energy-efficient drying at temperatures up to 120°C, optimizing glassware sanitation and process speed.
- The microprocessor control system features a 7-inch color LCD touchscreen with PLC programmability, offering 99 customizable cycles, adjustable parameters (time, temperature, additives, water settings), real-time monitoring, password protection, and power-off memory.
- The CTLW 120-320 series offers 12 preset cleaning programs for common contaminants plus 99 customizable PLC programs, allowing users to tailor washing steps, temperature, duration, detergent dosage, and drying settings for each cycle.
- The system offers 1-3 wash levels with automatic rack actuation, universal and interchangeable cleaning racks across models, and flexible height adjustment for versatile utensil cleaning."
- The monitoring system ensures safety and quality control through audible/visual alarms and dual water level sensors to prevent overflow during wash cycles.
- The water injection system features dual inlets (tap/pure water) with electromagnetic valve control, while automatic water/gas connections on each level minimize pressure loss for effective washing and drying.
- Dual pump system ensures efficient washing and draining, preventing cross-contamination and back flow while enhancing cleaning power.

Optional Accessories

Water Conductivity Monitoring

Printer

CTLW-60

CTLW-200A

CTLW-120

CTLW-200

CTLW-220

CTLW-320

CTLW-420

Technical Parameters

| Model	CTLW-60	CTLW-200A	CTLW-120	CTLW-200
Capacity (L)	80	200	120	200
Washer Load Level	1	2	1	2
Water Wash Power (kW)	0.25	0.4	0.4	0.75
Water Heater Power (kW)	3	3	5	5
MAX. Power (kW)	3.5	4	6	6
Water Consumption/Cycle (L)	8	15	17	18
Tank Internal Temperature (℃)	0-99	0-99	0-99	0-99
Water Supply Pressure (Mpa)	0.3-1.0	0.3-1.0	0.3-1.0	0.3-1.0
Peristaltic Pump for Cleaning Agent	2 independent pumps control detergent agent and neutralizing agent			
Cleaning Agent Level Sensor	YES	YES	YES	YES
Washing Pump	Sweden 150L/min	Sweden 400L/min	Sweden 400L/min	Sweden 800L/min
Drying Function	NO	NO	YES	YES
Steam Condenser	NO	NO	YES	YES
Dry Power (kW)	NO	NO	3	3
Control System	4.3" color LCD touch screen	7" color LCD touch screen display, microprocessor		
Cleaning Program	3 pre-set	12 pre-set programs (editable)+ 99 PLC free programs		
Password Protection	3 levels password	3 levels password	3 levels password	3 levels password
Safety Emergency Button	NO	NO	YES	YES
USB port	YES	YES	YES	YES
Integrated printer	NO	NO	Optional	Optional
Online Monitor Performance of Washing	NO	NO	Optional	Optional
Chamber Dimension (W*D*H)	470*462*422	526*542*645	600*629*539	600*629*679
Exterior Dimension (W*D*H)	529*648*650	607*824*1050	980*740*870	990*740*1145
Package Dimension (W*D*H)	650*780*850	720*980*1230	1110*940*1075	1110*940*1345
Net Weight (Host only, kg)	65	125	169	193
Gross Weight (Host with rack, kg)	104	165	200	260

Model	CTLW-220		CTLW-320		CTLW-420	
Capacity (L)	220		320		420	
Washer Load Level	2		3		2	
Water Wash Power (kW)	0.75		1.5		1.5	
Water Heater Power (kW)	5	15	5	15	5	15
MAX. Power (kW)	6	16	7	17	7	17
Water Consumption/Cycle (L)	20		22		25	
Tank Internal Temperature (℃)	0-99		0-99		0-99	
Water Supply Pressure (Mpa)	0.3-1.0		0.3-1.0		0.3-1.0	
Peristaltic Pump for Cleaning Agent	2 independent pumps control detergent agent and neutralizing agent					
Cleaning Agent Level Sensor	YES		YES		YES	
Washing Pump	Sweden 800L/min		Sweden 1000L/min		Sweden 1000L/min	
Drying Function	YES		YES		YES	
Steam Condenser	YES		YES		NO	
Dry Power (kW)	3.6		3.6		3	
Control System	7" color LCD touch screen display, microprocessor					
Cleaning Program	12 pre-set programs (editable)+ 99 PLC free programming					
Password Protection	3 levels password		3 levels password		3 levels password	
Safety Emergency Button	YES		YES		YES	
USB port	YES		YES		Optional	
Integrated printer	Optional		Optional		Optional	
Online Monitor Performance of Washing	Optional		Optional		NO	
Chamber Dimension (W*D*H) mm	600*629*754		600*629*915		688*700*703	
Exterior Dimension (W*D*H) mm	693*790*1825		693*790*1985		1110*900*2165	
Package Dimension (W*D*H) mm	810*990*2015		810*990*2185		1230*1070*2290	
Net Weight (Host only, kg)	220		237		370	
Gross Weight (Host with rack, kg)	300		320		460	
Door	Double-layered Glass Door		Double layered Glass Door		Double layered Glass Door 2 Doors,	
Safety Door Lock	YES		YES		YES	
Built-in RO Water Pump	YES		YES		NO	
Noise (dB)	<55		<55		<60	
Voltage	220V-240V	380V	220V-240V	380V	220V-240V	380V

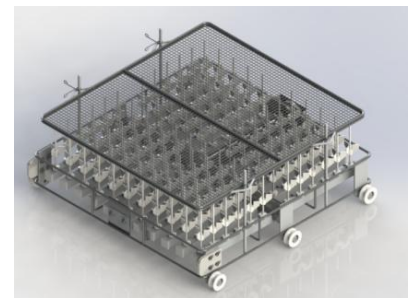## Accessories suit for CTLW-60
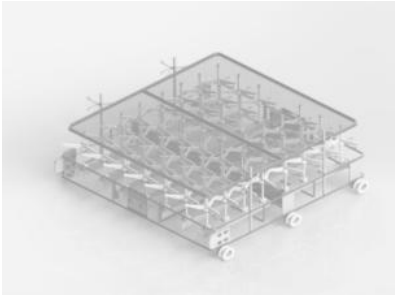
CWIR36B

36 nos. of injectors,distance betweeninjectors6cm, only one layer can be placed
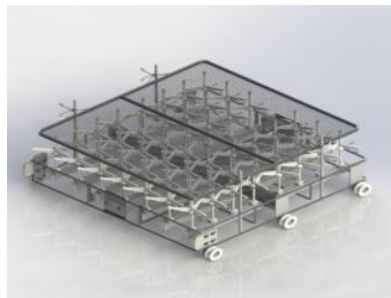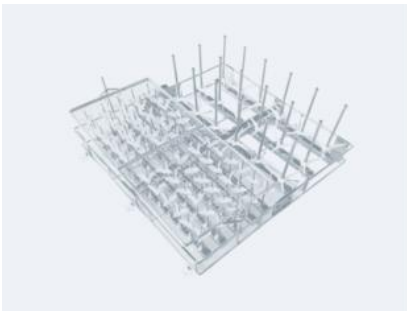

CWIR52B

52 nos.of injectors, distance between injectors 4.8cm, only one layer can be placed

CWIR126B

126 nos. of injectors, wash test tubes, liquid bottles, small volumetric asks, etc, only one layer can be placed

CWIR6018B

Hybrid rack, 60 nos. of test tubes, liquid asks +18 nos. of beakers, volumetric asks

CWBRO2B

Double-layer integrated, 4 cleaning baskets, wash medical and forensic surgical instruments, knives and scissors

CWBR04B

Single layer with 4 nos. of 1/4 round cleaning baskets for cleaning test tubes

CWPDR9024B

Double-layer integrated, wash 12 nos. of culture dishes each layer, and total 24 culture dishes

Accessories suit for CTLW-200A
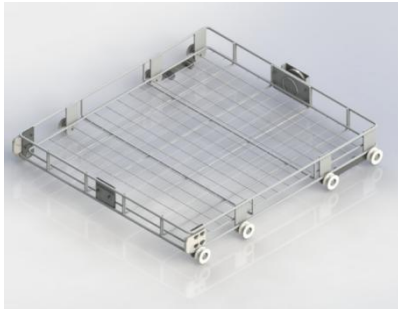
CWBR01A

Without injector,directly placed on the cleaning basket
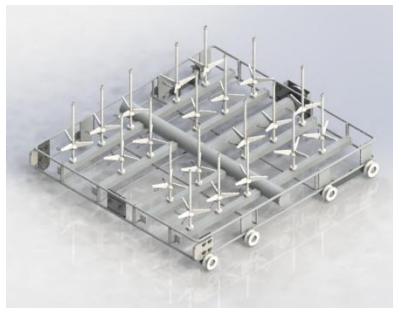
CWIR20A

20 nos. of injectors, distance between injectors 105mm
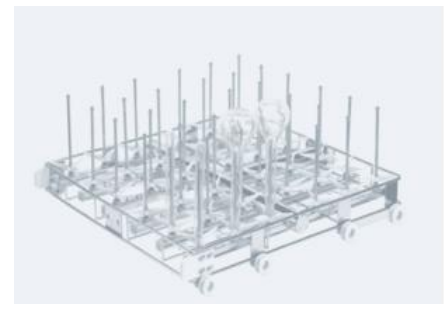
CWIR36A

36 nos. of injectors, distance between injectors 75mm
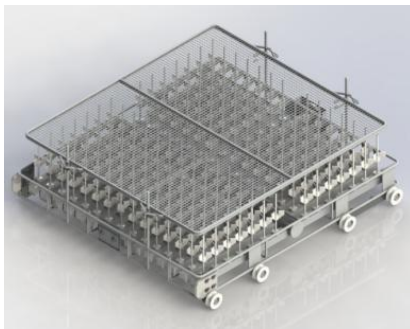
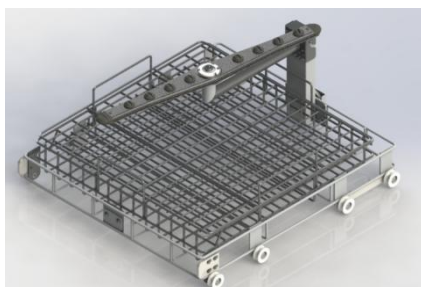**CWIR210A**

210 nos. of injectors for auto sampler vials
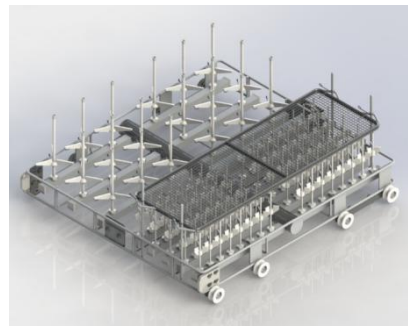
CWIR8018A

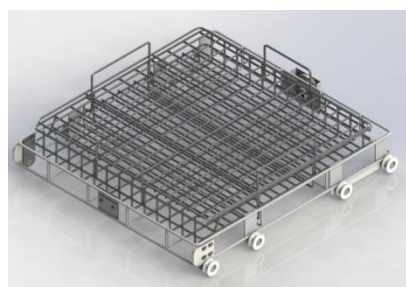80 nos. of injectors for auto sampler vials+ 18 nos. of injectors for Erlenmeyer flask

CWPR56A

56 nos. of pipettes, only one layer can be placed

CWPDR9044LA

Can wash 44 pieces at a time for culture dishes with a diameter of 90mm

CWPDR9044UA

Can wash 44 pieces at a time for culture dishes with a diameter of 90mm

Accessories suit for CTLW-120, 200, 220, 320, 420

Optional printer
can print cleaning process parameters

Online monitor performance of washing through test conductivity of water
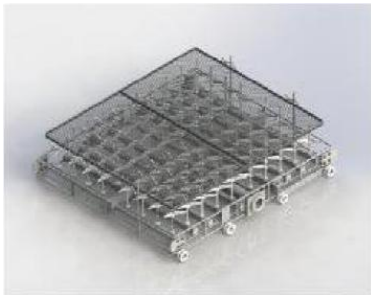
CWIR80
80 nos. of beaker tween injectors 56mm) which can wash small beakers, centrifuge tubes, volumetric asks, etc.
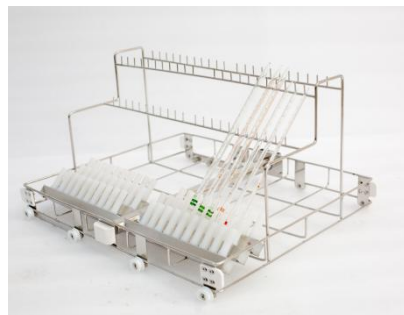
CWBR01
Without injector directly placed on the cleaning basket

CWIR11218
112 nos. of injectors (distance between injectors 30*30mm) +18 nos. of injectors (distance between injectors 90*86mm)
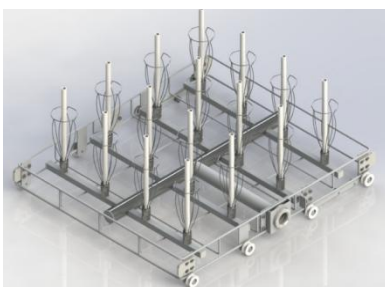
CWIR10072
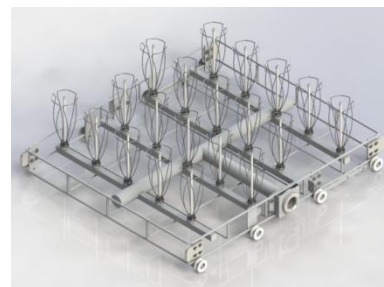100 nos. of pipettes + 72 nos. of auto sampler vials, upright cleaning

CWPR60
60 nos. of pipettes

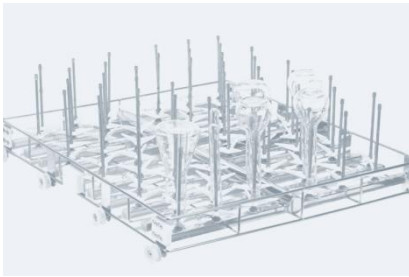**CWPR6060**
60 nos. of pipettes auto sampler vials

CWIR16
16 nos. of 1000ml Erlenmeyer asks, volumetric asks etc. (distance between injectors 135*129 mm)

CWIR20
20 nos. of 500ml Erlenmeyer asks, volumetric asks etc. (distance between injectors126*116mm)

CWIR36
36 nos. of 250mlerlenmeyer asks, volumetric asks, beakers, test tube etc.(distance between injectors 99* 90mm)

CWIR60

60 nos. of Erlenmeyer asks, test tubes, measuring cylinders, beakers, etc.(distance between injectors 72 *70mm)
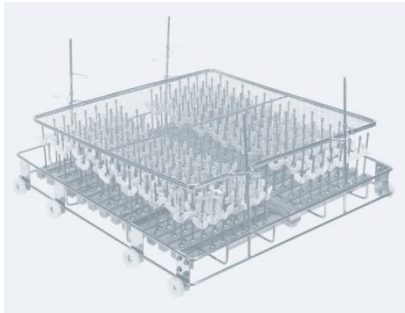

CWIR120

120 nos. of injectors, can wash centrifuge tubes, test tubes and less than 50ml volumetric asks, etc. (distance between injectors 53*48.5mm)

CWIR222

222 nos. of injectors, can wash auto sampler vials, test tubes (distance between injectors 31*23mm)+ 1 set of basic basket (for wash caps of auto sampler vial)

CWIR260

260 nos. of injectors, can wash auto sampler vials, test tubes (distance between injectors 38*23mm)

CWBR04

Without injector, with 4 cleaning baskets, can wash a large number of penicillin bottles, test tubes, etc.

CWPDR9070U

Can wash 70 pieces at a time for culture dishes with a diameter of 90mm

CWPDR9070L

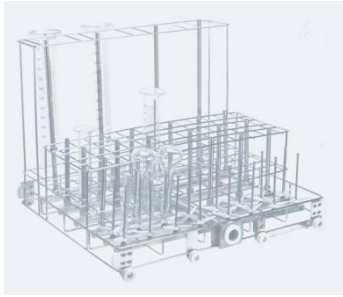Can wash 70 pieces at a time for culture dishes with a diameter of 90mm

CWPDR90210

Put it in the washing machine as a whole, which can wash 210 culture dishes at a time, and it can be used for CTLW-220
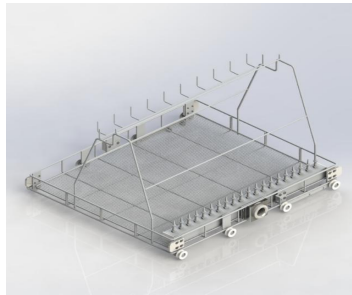

CWPDR90280

Put it in the washing machine as a whole, which can wash 280 culture dishes at a time, and it can be used for CTLW-320

CWIR38

38 nos. of graduated cylinders

CWRTR20

20 nos. of rubber tubes (3-5 m)

CWAB40

40 nos. of absorption bottles

Optional for injector racks, for big bottles, conventional rack with plastic supporter, this stainless steel supporter is for supplementary use