# Washer-disinfector Rapid-M-320

### Product introduction

Rapid-M-320 is an economic manual door washer-disinfector that researched and developed according to requirements of smaller hospitals or institution. Its function and washing effective is equal with Rapid-A-520. It is also can be used for disinfection of surgical instruments, wares, medical trays and plates, anesthesia instruments and corrugated hoses in hospital CSSD or operating room.

### **Product features**

### Door structure

Rapid-M-320 adopts double pull-down door structure. After opening the door, it can be regarded as a working platform for loading the washing rack and items. The double doors are interlocked and have self-lock function.

### Strong glass window

Three layers tempered glass window with excellent sealing ensures the security, insulation and easily observing during washing process.

### Operation System

LCD display screen can shows all the temperature, pressure, time, process stage and parameters. Easily operation by touch button on the panel.

SIEMENS PLC ensures the machine intelligent running and control. Built-in printer

SIEMENS PLC ensures the machine intelligent running and control. Built-in printer can automatically record the temperature, pressure, time, graph and A0 value.

#### A variety of programs

11 preset programs and 15 user-defined programs which can be edited according to user equirements.

### Outstanding loading capacity

12 DIN trays per cycle in four layers.

# Technical parameter for Rapid-M-320

Dimension		ension/volume H) mm/L	Overall dimension (L×W×H) mm	Washing rack dimension (L×W×H) mm	Net weight (kg)	Running weight (kg)
211101101011	601×592	<996/320	760×710×1930	590×558×630	300	350
Parameter	Disinfection temperature	Washing temperature	Disinfection time	Cycle time	Drying temperature	Standard drying time
	80 C~93 C	45 C	0~99mins	Electric heated 42 min	70~110 C	15 mins
Max.	Standard	DIN tray	Middle dressing bowl(16cm)	Middle kidney basin	All cap	pacity
capacity	10 (480×250×50mm)		99 Pcs	60 Pcs	320L	
		RO	water	Driving power (Electric heated)		ited)
Energy	Pressu	re MPa	Flow	Voltage /Frequen	icy	Input power
	0.2	-0.5	22L/min	380/50Hz		22.5kW
Energy	RO water	Kg/cycle	Washing detergent	Anti-rust lubricating agen	t	Power (Electric heated)
(Standard program)	1	00	22000ml×concentration ratio	22000ml×concentratio	on ratio	10.5kW·h

# Varieties of loading racks

### Five layers instrument washing rack

### Capable items

General surgical instrument: varieties of scissors, pliers and tweezers etc.

Instrument thickness≤50mm

#### Feature

- Made of high quality 316L stainless steel.
- · Integrated welded, strong and durable.
- Layer spacing≥ 55mm; each layer load capacity≥2 DIN trays.
- · Four spray arms ensure that sufficient water flow on each layer.
- In addition to standard DIN trays, other suitable size trays or baskets can be loaded.

### Loading capacity

The size of DIN tray:480x250x50mm; load capacity of each DIN tray: 20-30 pieces of general surgical instrument.



Name	Machine model	Order code	Loading capacity
Five layers instrument washing rack	Rapid-M-320	Rapid320.05C	10 DIN trays
	Rapid-A-520	Rapid520.05C	15 DIN trays
	DC-3, DC-4	Super6000.05C	15 DIN trays

## Four layers instrument washing rack

### Capable items

General surgical instrument: varieties of scissors, pliers and tweezers etc, Instrument thickness≤60mm

### Feature

- · Made of high quality 316L stainless steel.
- Integrated welded, strong and durable.
- Layer spacing more than 55mm; each layer can load more than 2 DIN travs.
- Four spray arms ensure that sufficient water flow on each layer.
- In addition to standard DIN trays, other suitable size trays or baskets can be loaded.

### Loading capacity

The size of DIN tray:480x250x50mm; load capacity of each DIN tray: 20-30 pieces of general surgical instrument.



Name	Machine model	Order code	Loading capacity
	Rapid-M-320	Rapid320.05A	8 DIN
Four layers instrument washing rack	Rapid-A-520	Rapid520.05A	12 DIN
naoring taon	DC-3, DC-4	Super6000.05A	12 DIN

# Bowls and plates washing rack

### Capable items

Bowls and plates, Kidney basins and other capable instruments

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- Made of high quality 316L stainless steel.
- Can be customized according to customer's special needs.

### Loading capacity

Name	Machine model	Order code	Loading capacity
Bowls and plates washing rack	Rapid-M-320	Rapid320.05L	Kidney basinsx42+Bowlsx33
	Rapid-A-520	Rapid520.05L	Kidney basinsx64+Bowlsx52
Washing rask	DC-3, DC-4	Super6000.05L	Kidney basinsx64+Bowlsx52

### Anesthesia/ respiration hose washing rack

#### Capable items

Anesthesia/ respiration hoses and accessories

### Feature

- Hoses loaded in coiled structure, Inner diameter≥8mm, Length ≤2m.
- · Internal spray with prefect washing effect.
- Hoses adaptor (material PP, interface size 8mm), both available for adult hoses and children hoses.
- Left side spray nuzzle is used for washing breathing bag, blind end bottle and other suitable equipment.
- Right side small spray nuzzle is used for washing small accessories of the ventilator (three links, joints, etc.)

### Loading capacity

Name	Machine model	Order code	Loading capacity
	Rapid-M-320	Rapid320.05B	Anesthesia/ respiration hose x 16+ accessories
Bowls and plates	Rapid-A-520	Rapid520.05B	Anesthesia/ respiration hose x 30+ accessories
washing rack	DC-3, DC-4	Super6000.05B	Anesthesia/ respiration hose x 30+ accessories

# Minimally invasive surgical instruments washing rack

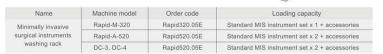
### Capable items

Rigid endoscope, Aspirator, Irrigator, Trocar, T-branch pipe, Test tube or similar instrument

#### O Feature

- · Mainly used for washing minimally invasive surgical instruments.
- Made of high quality 316L stainless steel.
- Can be customized according to customer's special needs.

### Loading capacity





# Surgical robot operation arm washing rack

### Capable items

Specialized for surgical robot operation arm

#### Feature

- · Made of high quality 316L stainless steel.
- Other accessories (puncture needles, etc.) can be washed.
- Loading capacity



Name	Machine model	Order code	Loading capacity	
Surgical robot operation	Rapid-A-520			
arm washing rack	DC-3, DC-4	14680-089.00	Operation arm x 12 + accessories	

## Dental handpiece washing rack

### Capable items

Dental handpiece, saliva suction apparatus and other scissors, pliers, and tweezers.

### Feature

- · Made of high quality 316L stainless steel.
- · Silicone is molded by medical silicone mold.
- Suitable for washing high speed handpiece and low speed handpiece.

Machine model

Rapid-M-320

Rapid-A-520

DC-3, DC-4

· Special handpiece needs special silicone socket

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	Order code	Loading capacity
	Rapid320.05F	Dental handpiece x 56 + accessories
	Rapid520.05F	Dental handpiece x 72 + accessories

### Glassware washing rack

### Capable items

Name

Dental handpiece

washing rack

Glass bottle, plastic bottle and other bottle-shape items, size: 15mm≤Diameter≤85mm

### Feature

- · Made of high quality 316L stainless steel.
- Tripod and the spray nuzzle is molded beautiful and durable.
- The height of the tripod can be adjusted according to the depth of the glassware.
- . Can be customized according to customer's special needs.
- The glassware needs to be placed upside down on each nozzle.

## Loading capacity



Dental handpiece x 90+ accessories

Name	Machine model	Order code	Loading capacity
	Rapid-M-320	Rapid320.05I	Glassware x30+ accessories
Glassware washing rack	Rapid-A-520	520 Rapid520.05l Glassware x48 accessories	Glassware x48 accessories
(1997)	DC-3, DC-4	Super6000.05I	Glassware x48 accessories

Super6000.05F

# Humidification bottle washing rack

### O Capable items

Humidification bottle, milk bottle, measuring cylinder, test tube and beaker, size: 15mm≤Diameter≤65mm, Length≤100mm.

### • Feature

- Made of high quality 316L stainless steel.
- · Spray nuzzle is molded beautiful and durable.
- Can be customized according to customer's special needs.

### Loading capacity

Name	Machine model	Order code	Loading capacity
Humidification bottle washing rack	Rapid-M-320	Rapid320.05N	Humidification bottlesx96 + accessories
	Rapid-A-520	Rapid520.05N	Humidification bottlesx160 + accessories
	DC-3, DC-4	Super6000.05N	Humidification bottlesx160 + accessories

### Tweezers cup washing rack

### Capable items

Tweezers cup, bottle, test tube, size: Diameter≤100mm, Length≤ 200mm.

### Feature

- Made of high quality 316L stainless steel.
- · Spray nuzzle is molded beautiful and durable.
- · Can be customized according to different size of tweezers cups.
- · After the pretreatment, the tweezers cup needs to be placed upside down on each nozzle. In the bottom of each spray nozzle, there is spring piece for fixing to ensure that the tweezers cups will not shake or drop during the washing process.



### Loading capacity

Name	Machine model	Order code	Loading capacity
Tweezers cup washing rack	Rapid-M-320	Rapid320.05M	Tweezers cups x 30 + accessories
	Rapid-A-520	Super6000.05M	Tweezers cups x 48 + accessories
	DC-3, DC-4	Super6000.05M	Tweezers cups x 48 + accessories

### Operation shoes washing rack

### Capable items

Operation shoes

### Feature

- Made of high quality 316L stainless steel.
- . Spray nuzzle is molded beautiful and durable.
- . Can be customized according to special sizes of the operation shoes.

### Loading capacity





### Capable items

General surgical instrument: varieties of scissors, pliers and tweezers etc, bowl and plate instrument, operation shoes and instrument containers, etc.

### • Feature

- This rack can wash relatively wide variety of different instrument, but each load is relatively less.
- · Made of high quality 316L stainless steel.
- · Single spray arm ensures enough space on each layer to place different instruments.
- Integrated welded, strong and durable.
- · Can be customized according to customer's special needs.

### Loading capacity

Name	Machine model	Order code	Loading capacity
Multi-functional washing rack	Rapid-A-520	Rapid520.05D	Kidney basin x 32+Bowlsx32 + Multi-functional basket

### Washing rack transfer trolley

### • Feature

- · Used to load and transport the washing rack of the washer-disinfector.
- Made of high quality 316L stainless steel.
- · With a number of patented technologies.
- With automatic water collection device, it prevents secondary pollution of instrument.

# Washing rack storage platform

### o Feature

- · Used to store washing racks.
- . Made of high quality 316L stainless steel, which is strong and durable.

### Instrument loading trays

Order code	Size(mm)	
CSSD.QXK	480x250x50	DIN
CSSD.QXKX	240x250x50	DIN
CSSD.QXK1(SPI)	450x340x70	SPI
CSSD.QXK2(SPI)	340x250x70	SPI
CSSD.QXK3(SPI)	250x170x70	SPI
CSSD.QXK4	420x250x50	
CSSD.QXK5	250x200x50	
CSSD.QXK6	400x200x50	
CSSD.QXK7	350×170×70	
CSSD.QXK8	300x250x50	











# Ultrasonic washer QX series

### Product introduction

QX series ultrasonic washer is essential washing machine in CSSD, operating room and laboratory.

SHINVA provides integrated ultrasonic washer solutions, including preliminary washing, secondary washing and deep washing with different frequency. Users can also choose the ultrasonic washing auxiliary machine for flushing and drying. The machine consists of washing tank, ultrasonic generator, ultrasonic transducer, heating tube, temperature transmitter, and water level transmitter, draining pump, basket and pipeline. It uses high frequency oscillation signal, which sent out by ultrasonic generator, and converts to high frequency mechanical oscillation signal and diffuses into the cleaning solution. The ultrasonic spreads forward in the cleaning solution to generate millions of tiny bubbles. During the process called 'Cavitation' the bubbles implode immediately to generate high pressure and impacts the articles to spall the fouling adhered on the surface and gap of the articles to achieve cleaning purpose.



### Product features

- Excellent washing effect and high washing accuracy that could clean those instruments with uneven surface or tiny gap.
- High washing speed improves working efficiency. It protects the instrument from contamination caused by hand contact.
- The tank and outer cover adopt high quality stainless steel which is durable and easy to clean.
- All tanks are auto water-injecting which injects water to certain water level.
- All tanks are equipped with reliable LCD monitor that could be controlled independently.
- It can be equipped with extended-function tank: flushing tank, drying tank.

Flushing tank: High pressure water flushing after ultrasonic washing. It is equipped powerful circulating pump and specialized nozzle to flush, rinse, disinfect and lubricating on instrument.

**Drying tank:** Used to dry the instrument after washing; the high quality heater and efficient fan ensures the thoroughly dry.





Flushing tank



Ultrasonic washe

Drying t

# Automatic lifting ultrasonic washer



QX2000-A ultrasonic washer equipped with lift system that can lift the top lid and baskets automatically after washing which decreases the labor intensity.



# **Technical parameters**

Model		QX2000 QX1500						
Order code	QX2000	QX2000-C	QX2000-G	QX2000-D	QX2000-S	QX1500	QX1500-D	QX1500-S
Chamber dimension (LxWxH) mm		600:	x420x330 / 8	IOL		700	700x300x310 / 60L	
Overall dimension (LxWxH)mm		800x640x830 900x520x830				0		
Water consumption (L)	65	20x3		65	65	65	65	65
Max. Input power (kVA)	11.5	11.5	3	11.5	11.5	11.5	11.5	11.5
Ultrasonic power (kVA)	2			2	2	1.5	1.5	1.5
Function	Ultrasonic washing	Flush washing /lubricating /disinfection	Drying	Ultrasonic washing	Ultrasonic washing	Ultrasonic washing		
Frequency(kHz)	40			40/100	40/80/100	40	40/100	40/80/100
Remark	Single frequency			Double frequency	Triple frequency	Single frequency	Double frequency	Triple frequency

### Technical parameters for Automatic lifting ultrasonic washer

QX2000-A	QX2000-DA	QX2000-SA			
600x420x330					
800x694x830					
65					
11.5					
2					
Ultrasonic washing					
40	40/100	40/80/100			
Single frequency	Double frequency	Triple frequency			
	600x420x330 800x694x830 65 11.5 2 Ultrasonic washing 40	600x420x330 800x694x830 65 11.5 2 Ultrasonic washing 40 40/100			