# **Automatic Cage Washer**

Automatic cage washer is designed for the laboratory animal industry, suitable for laboratory animal feeding animal cages, drinking bottles, feed boxes and other equipment automatic cleaning, disinfection and drying.



- High efficiency
  - Equipped with preheating water tank to reduce the preparation time of water heating.
  - •The quick cleaning program can be cleaned once every 4-6 minutes to meet the require□ment of fast cleaning.
  - ·Up to 40 mouse IVC cages can be washed at a time.
- Good cleaning effect
  - •The design of independent pipelines for cleaning and rinsing ensures that there are no residues on the surface of items after cleaning.
  - Imported European circulation pump, large circulation volume design, strong spraying force, stable quality, effectively improving the cleaning effect.
  - ·Patented technology spray arm and fan shaped water curtain spray cleans the outer surface, ensuring 360° cleaning of vessels without dead ends.
  - ·The cleaning agent is automatically added quantitatively with a peristaltic pump to ensure the consistency of cleaning data.

- 1 Low energy consumption
  - •The final rinse water is used for the next cleaning to save water.
  - •The cleaning chamber and preheated water tank are covered with thermal insulation materials to effectively reduce heat loss and reduce noise

## 4 .Control system

- ·7-inch color LCD touch screen, easy to operate; screen pressure-sensitive operation is more suitable for complex use environments.
- ·Siemens PLC programmable operating system, stable and reliable performance, antimagnetic and anti-penetration; independently designed and developed control system to adapt to various operation and management needs.
- Cleaning temperature, time, cleaning agent filling amount and other parameters can be set.
- •The LCD screen displays the current operating steps and working parameters in real time.
- ·With power·off memory function, if the power is cut off during the operation of the program, the equipment can continue to run the program state before the power outage until it is completed after the power supply again.
- ·Alarm function: circulating pump overheating, abnormal water heating, abnormal air heating, lack of cleaning agent, abnormal water inlet etc.

### Structural

- •The shell is made of 304 stainless steel, corrosion resistant, durable and easy to clean.
- •The cleaning chamber is made of mirror 316L stainless steel to reduce the residue, the bottom bevel structure and improve the circulating backwater efficiency.
- Double-layer hollow toughened glass door, heat insulation, noise reduction, easy to observe.

#### 6 Program

- •The cleaning function has 10 standard programs, which can independently set and modify cleaning parameters. The 100 custom programs can independently set Chinese, English, numerical and other names;
- ·Manual program: manual testing and operation can be achieved, with greater freedom.
- Disinfection program: thermal disinfection can be achieved, and the disinfection level can be displayed and calibrated in real time through the A0 value.

### Security

- •The equipment is equipped with an emergency stop switch, which can immediately cut off the power supply to stop the equipment in case of emergency.
- •The equipment has real-time monitoring function for water leakage.
- ·The sealed door has a safety protection device and will automatically stop when encoun

  ☐tering obstacles during operation to prevent accidents.
- After the equipment is cleaned and started, the door body is automatically locked and cannot be opened; The hatch door can only be opened after the whole process is over and the temperature is lowered.

# Specification

Model	INOGW-1500C	INOGW-1500CZ
Dimensions(W*D*H)mm	2140×925×1950	
Inner chamber volume	1500L	
Control system	PLC/Siemens	
Touch screen	7-inch	
Capacity	Up to 40 mouse IVC cages	
Time	Quick cleaning program 4·6	
Door	Automatic lift door	
Cleaning temperature	> 60°C(adjustable)	
Rinsing tempereture	> 82°C(adjustable)	
Drying temperature	Room temperature~120	
Heating method	Electrical heating	Steam heating
Power supply	AC 380V/50Hz 34kW	AC 380V/50Hz 4kW
Steam source	/	Pressure: 0.3·0.5Mpa, flow rate: 50Kg/h
Water source	Softened water: Pressure:0.2·0.5Mpa, flow rate: 25L/min	
Compressed air	Pressure: 0.5~0.7Mpa, flow rate: 100L/min	
External dimensions (W*D*H) mm	2250×1050×2160	
Packing weight:	600kg	

# **Automatic Drinking Bottle Washers**

Automatic Drinking Bottle Washers are made for the laboratory animal industry and are suitable for the automatic cleaning and sterilizing of drinking bottles for laboratory animal feeding.



- High efficiency:
  - ·Equipped with preheating water tank, reducing the waiting time for the cleaning water to warm up.
  - ·4·6 minutes fast cleaning, can clean 72 drinking bottles at a time.
- **2** Good cleaning effect:
  - Original imported European circulation pump, large circulation volume design, strong spray strength, stable quality, effectively improve the cleaning effect.
  - ·Patented technology spray arm, fan-shaped water curtain spray cleaning of the outer surface, to ensure that the vessel 360 ° no dead angle cleaning.
  - ·Cleaning additives with a peristaltic pump automatically quantitatively added to ensure the consistency of cleaning data.

- 3 Low energy consumption:
  - ·Water after rinsing is used for the next cleaning, saving water;
  - •The washing compartment/preheating water tank is pasted with heat preservation material, and the sealing door adopts double-layer glass to reduce heat loss;
- 4 Humanized operating system
  - ·Human-machine interface is 7·inch color LCD touch screen, convenient operation; screen pressure-sensitive operation, more suitable for complex use environment; ·Siemens PLC programmable operating system, stable and reliable performance, anti-magnetic, anti-impact penetration; independent design and development of the control system to adapt to a variety of operational and management needs; ·Cleaning temperature, time, cleaning agent adding and other parameters can be set by yourself;
  - ·Liquid crystal screen real·time display of the current operating steps and working parameters;
  - ·With power failure memory function, if power failure occurs in the process of program execution, the equipment can continue to execute the program state before power failure until completion after power supply again.

#### Structure

- ·Shell 304 stainless steel, cleaning cavity 316 stainless steel, corrosion·resistant, durable, easy to clean;
- ·Cleaning cavity mirror stainless steel plate, reduce residue, the bottom of the beveled structure, improve the efficiency of the cycle back to the water;
- Double hollow tempered glass door, heat insulation, noise reduction, easy to observe.

### 6 Program

- ·Preset program: 10 groups, can be independently set, combination of cleaning steps; ·Custom program: 100 groups, can be set in Chinese, English, digital and other various name modes, independent setting cleaning steps;
- ·Manual program: can realize manual testing and operation, with greater freedom; ·Disinfection program: thermal disinfection can be realized, and the disinfection level can be displayed and calibrated in real time through A0 value.

### Security

- Equipment with emergency stop switch, in case of emergency can immediately cut off the power supply to make the equipment stop running
- After the equipment cleaning is started, the door is automatically locked and cannot be opened; the cabin door can be opened only after all processes are finished and cooled down;
- •The whole system circuit are safety monitoring, with water leakage monitoring, open door temperature setting and other functions;
- ·Alarm function: circulating pump overheating, water heating abnormality, air heating abnormality, cleaning fluid shortage, water inlet abnormality, etc.

# Specification

Model	INOGW-1500C	INOGW-1500CZ
Dimensions(W*D*H)mm	2140×925×1950	
Inner chamber volume	1500L	
Control system	PLC/Siemens	
Touch screen	7-inch	
Capacity	Up to 40 mouse IVC cages	
Time	Quick cleaning program 4·6	
Door	Automatic lift door	
Cleaning temperature	> 60°C(adjustable)	
Rinsing tempereture	> 82°C(adjustable)	
Drying temperature	Room temperature~120	
Heating method	Electrical heating	Steam heating
Power supply	AC 380V/50Hz 34kW	AC 380V/50Hz 4kW
Steam source	/	Pressure: 0.3·0.5Mpa, flow rate: 50Kg/h
Water source	Softened water: Pressure:0.2·0.5Mpa, flow rate: 25L/min	
Compressed air	Pressure: 0.5~0.7Mpa, flow rate: 100L/min	
External dimensions (W*D*H) mm	2250×1050×2160	
Packing weight:	600kg	