



## GLASS WARE WASHING MACHINE ATL 160

### System advantage

Is designed for cleaning various shaped glassware with big cleaning space, less foot space(600\*630mm), with 4 omni-directional wheels on base, convenient to move, which allow the system to work within limited space. It can be coupled with drying, condensation system for auto drying of the loaded labware to reduce cost and time. There are different model of cleaning racks to be taken for various shaped flasks, big volume graduated cylinders, etc., The system can also be coupled with water softer and pure water machine for better feedwater conditions.

### Application

Widely used in science research center, college, hospital and medical treatment organizations for diversified shaped glassware including lab glasses, ceramic, metal, plastic, rubber culture dish, micro cover glass, test tube, triangular flask, conical flask, beaker, graduated cylinder, wide mouth bottle, funnel, and vials etc.

### Running program

Prewash—washing liquid wash—rinse—high temperature drying—high temperature sterilizing.

### Main characteristics

Monolayer wash for big volume glassware like wide mouth bottle. Acid, alkali, or neutralized washing liquid are available for washing with different contamination grade. Complete washing procedures of wash, dry and sterilizing through single program. No need additional drying oven, and disinfection cabinet, reduce cost. Washing chamber is partly of one piece mould 316 sanitary grade stainless steel, improve aesthetic extent, no leakage, improve cleaning effectiveness, can be comparable with name brand.

**Control system**

Programmable PLC intelligent control system

Contain at least 6 sets of standard washing mode and 12 service formulas, freely programmable, able to create and store more than 40 washing program, one touch wash function. 7inch LCD color touch screen. Washing procedures is displayed. User can set parameter on water temperature, washing time, drying time, and washing liquid dispensing etc., so as to have a more targeted washing, reduce cost and power consumption. For more specific program requirement, please contact us directly, our engineering team will specially customize a detailed solution meeting customer requirement.

Inbuilt CPU for orderly programme running. Printer can be connected for record of washing( optional) 3 level strictly safety system protection, operating without risk.

**Structure**

304 stainless steel exterior, 316 sanitary grade stainless steel one piece mould chamber, super anti corrosion. Double walled connectors much reduce noise, heat loss, so as to reduce cost. Inbuilt heating element, avoid scalding. Italy stainless steel reinforced booster pump, prevent secondary pollution to water source. employ high grade stainless steel reinforced flexible hose, prevent secondary contamination to water source. self lock chamber door, when opening, system automatically lie off

**Efficiency**

Less water consumption, water consumption can reduce 20-30 compare to other Standard configuration is 30-40 beakers, or 60-100 pc small test tube.

30 Mins for single pass wash, improve washing efficiency.

Low water consumption, high circulating speed, less washing liquid consumption.

**High temperature wash**

Water temperature can be set up to 98 centigrade for wash with washing liquid.

**Purified water/pure water/DI water preheating system**

Can be coupled with in built water softer, pure water machine. Water in stored in external storage tank can be preheated.

**Water pump system**

Double circulating, total capacity 500L/hr., Pressure up to 2kg, ensure Max washing efficiency, ensure no broken of the loaded labware. drain system employ separate drain pump, ensure there's no contamination to water source and the pump.

**Washing liquid dispense system**

Incorporate 2 detergent dispensing pumps, can automatically and precisely dispense washing liquid.

2 detergent storage tanks(5L), ensure convenient and easy handling.

Single path valve is incorporated to each pump, ensure no backflow water to detergent tank.

**Filtration system**

Triple filtration system ensure only clean water( no particle) can be circulated inside the pump for longer pump service life.

Water tank employs triple layer filter that captures residues so that they are not re-circulated, thus lengthening pump life.

**Dry condensation system**

Air filter cartridge with environmental protection grade filtration device, coupled with 2000W heating power fan dryer.

Drying time can be set between 0-300mins, hot drying procedure followed by cold drying, makes labware cool in time

Incorporated condensation device, can collect & turn the vapor into condensed water and backflow to water tank, prevent vapor inflation, ensure no vapor contamination to laboratory.

**Cleaning basket**

Employ 304 grade stainless steel cleaning basket, double layer, monolayer ( for higher labware)hollow inlet water spraying holders for efficient cleaning of the chamber, demountable holders,convenient for various shaped labware.

**Pipeline equipment**

1X for feeding water, presure 200-1000Mpa

Water inlet pipe 3/4spiral screwed union. Screwed heat resisting material drain pipe, can be connected to drainage facility.

**Power connection**

Single phase AC 220-250V/50Hz( triple phase 380V optional)

**Technical parameter**

**External dimension** : 670 x 600 x 1610

**Water tank capacity** : 25L

**Heating power rate** : 2000W

**Scavenging efficiency** : standard configuration 16pc\* double layer ( customized design available )

**Effective Max. Height** : 20cm (for bottom layer ) , 15cm ( upper layer ) , monolayer 45cm

**Washing liquid allocated** : acid、alkaline respectively 5L、 2 supply pump

**Single pass water consumption** : 50-70L

**Single pass cleaningtime** : 20-30min

**Washing mode** : spraying from inside (the holder syringe) the top, the bottom 360°without dead angle.

**Operation system** : single chip 5.0blue touch screen ( standard configuration) 、 PLC 4.3inch color touch screen(higher configuration)

**Chamber dimension** : 500\*550\*630

**Scavenging pump power rate** : 750W

Analytical Group Companies  
Analytical Technologies Limited  
Analytical Bio-Technologies  
Analytical Bio- Med  
HPLC Solutions