## HOSPITAL



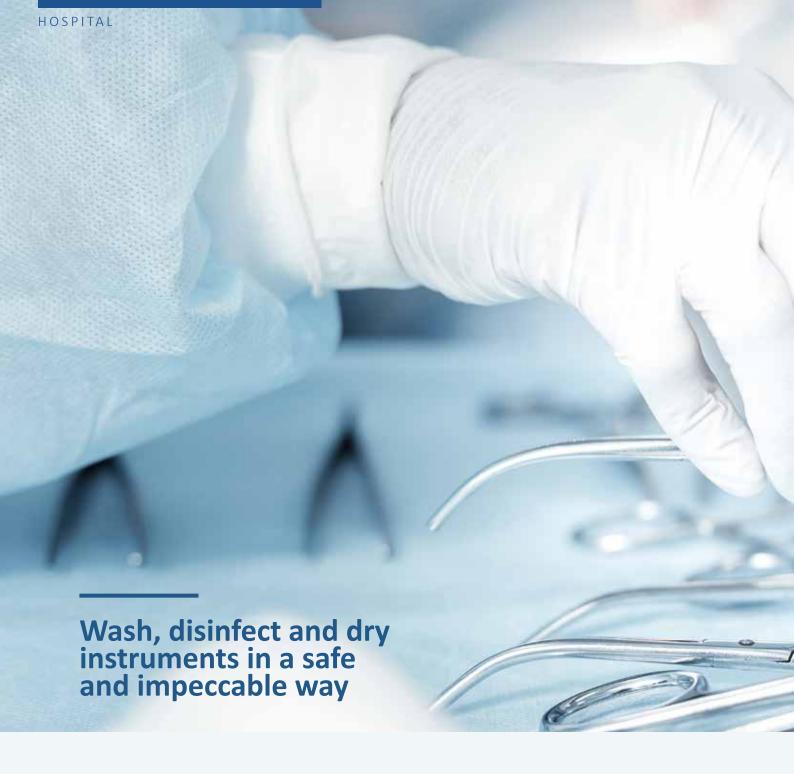


Your Health, our Technology

## **AWD655**

Instruments Washer Disinfector

www.at-os.com



Instrument washer disinfectors designed to meet hygiene Standard EN-ISO 15883-1/2 and 5.

As a result of using the highest technologies, the AWD655 are developed to offer different models, suitable for the huge variety of instruments found in hospital departments, dental clinics, surgical and central sterilization rooms, satisfying all kinds of medical requests.

The large choice of washing baskets and accessories allows the user to wash, disinfect and dry the most sophisticated instruments, such as the tubular ones.

This line offers high reliability, for the benefit of users and patients!





Excellent results



Up to 450 liters of volume



Color graphic display



Perfect disinfection



Energy saving



Innovative washing programs



High reliability



Software PC

### **AWD655 Line**





Stainless steel door with drying

#### **AWD655-8XE**

Stainless steel door without drying





#### AWD655-8

Glass door with dryinga

#### AWD655-8E

Glass door without drying



Stainless steel door with drying

#### AWD655-8XEL

Stainless steel door without drying

#### AWD655-8L

Glass door with dryinga

#### **AWD655-8EL**

Glass door without drying









#### Chemical-resistant 🖄 double glass

The door is made of two layers of tempered glass, resistant to chemicals, even the most aggressive ones. It allows to see inside the wash chamber during operation.



## Stainless steel

The wash chamber is made of stainless steel AISI 316L (EN 1.4404) while the chassis and external panels are made of stainless steel AISI 304 (EN 1.4301). They are shockproof and long-lasting. Scotch Brite surface finish makes cleaning easier..

The hydraulic system is also made of AISI 304 stainless steel, on request it is possible to make it in AISI 316 stainless steel.



#### **Ergonomic** handle

Thanks to the ergonomic handle, on models equipped with manual door, the door opening and closing functions are made easy without efforts.



#### Support for an $rac{1}{2}$ easy access

On request, AWD655-2H and AWD655-8 (and variants) can be integrated with a stainless steel support, under the machine, that provide an ergonomic height when the machine is not installed under the counter, making the access to the machine easier for the operator. The support is also useful for storing chemicals.



#### Door locking and security system

The machines are equipped with an automatic door locking system that ensures the door is locked safely, while the crush gasket ensures its sealing. For the safety of the operators, the machine does not allow the door to be unlocked during the wash cycle or in the presence of high temperatures. An extra sensor guarantee that, even if in presence of a malfunction of the machine, the water pump will be switched off with the unlock of the door.



#### **Printer**

On request, the machines can be equipped with a printer that prints the receipt log of the running program.



#### Touch-pad keyboard with graphic display

The touch control panel consists of 8 backlit buttons and a 3.5" LCD display. The AWD655-10A and AWD655-15A (and their variants) are equipped with a 7" touch-screen display on the load side. The flat display with colour graphics shows all cycle parameters, alarm messages, temperatures measured by the two temperature probes located in the washing chamber, drying temperatures and the  $A_0$  value. Models with pass-through door are equipped with a second 3.5" monitor on the discharge side (available on on request 7" touch-screen display).



#### Alarm-check system

This system helps the operator to understand why an alarm has occurred before consulting the user manual. A text appears on the display with the number, the image of the alarm and the text explaining the possible causes of it.



## **Customizable programs**

The machines are supplied with a set of standard programs, variable according to the model, and with the addition of customizable programs, up to a maximum of 40 total programs.



#### **Double door** system

AWD655-10D, AWD655-10AD and AWD655-15AD (and variants) are equipped with two interlocked doors: one for loading the dirty trolleys with the instruments to be washed (dirty area) and the other positioned at the rear for unloading the clean trolleys with the disinfected instruments (clean area). The machine does not allow the unlocking of the two doors at the same time. The door of the basket in the unloading area is unlocked only if a cycle is successfully completed.



#### Wash chamber LED light

On request, the machines can be equipped with low energy consumption LED positioned inside the wash chamber. The LED ensures a better visibility during the wash cycle and during loading and unloading of the basket or trolley. The LED may vary in color depending on machine status: white light for stand-by, red light in case of alarm, and green light when the cycle is successfully completed.



#### Reliable washing

Thanks to a dedicated pressure switch that monitors in real time the water pressure of the washing circuit, all the washing parameters will be always perfect. An alarm message on the display will indicate if there's a pressure lost during the cycle, causing a cycle stop.



#### Microcontroller

The machines are equipped with microcontroller that constantly monitors its operation. It's provided with an internal flash memory that allows the machines to store all the information regarding: cycle params, allarms and log history. An internal watchdog monitor the microcontroller and block the device in case of a malfunction.



#### **Boiler for Speed Cycle**

The models with boilers help to speed up the water heating times and to save water. The first boiler is filled with deionized water maintained at a pre-set temperature thanks to its internal heating element, it helps to reduce the electricity consumption and to increase system efficiency; The deionized water is sent to the second boiler via a pump, allowing for shorter hot water loading times and water savings at the end of the phase.



#### Water softener system

On request, the machines can be integrated with a system that makes it possible to soften the cold and hot water (depending on the model) entering the wash chamber, so as to reduce the formation of limestone in the hydraulic circuit of the machine. The machine automatically regenerates the resins based on the water hardness set at the time of installation.



#### **Humidity sensor** for control drying

On request, AWD655-15A (and variants) can be equipped with a humidity sensor that monitors the humidity value in the washing chamber at the end of the drying phase. Using a humidity probe, the device automatically regulates the duration of the drying phase in order to obtain a predefined drying result.



#### Steam condenser system

The machines are equipped with an effective steam condenser system that acts to reduce the steam during the disinfection and drying phases.



#### Spray arm monitor

On request, the machines can be equipped with the spray arm monitor system. If the spray arm monitor is enabled, it checks the correct rotation of the spray arm. An alarm message on the display will indicate a problem during the cycle.



#### Conductivity probe

On request, the machines can be equipped with a conductivity probe that checks the water purity level at the end of rinsing, before disinfection. The machine repeats the rinse cycle again to remove any residue if the conductivity probe detects a water purity level, expressed in µS/cm, higher than the preset one.



#### (E.T.S.) Empty **Total System**

On request, AWD655-10, AWD655-10A and AWD655-15A (and variants) can be equipped with the E.T.S. system which, at the end of each cycle, automatically discharges the residual water from the pump, water storage tank and pipes, to ensure complete cleaning inside the machine.



#### Automatic washing trolley recognition

On request, AWD655-10, AWD655-10A and AWD655-15A (and variants) can be enabled to understand when a trolley is inserted: it is not possible to start a program if there is no trolley inside the wash chamber. The application recognizes which type of trolley is inserted and suggests to the user which program to start. However, it remains possible to enable or disable programs that are not recommended for this type of trolley.



During the drying phase the forced air, pushed by a blower, is introduced into the washing chamber, passing through an electric heater. The air then comes out of the jets of the spray arms to ensure a warm uniform air distribution. The HEPA H14 filter allows to block the fine dust present in the air with an efficiency of 99.995%. Furthermore, in order not to damage the filter, a pre-filter is placed in front of it to block the larger particles.



#### **Models without** drying system

AWD655-2XE, AWD655-8XE and AWD655-8XEL are without drying system: at the end of the cycle, the machine automatically opens the door partially, to dry the instruments with a natural air recirculation, saving on consumption. Read the user manual for more info and details.



#### Filter cleaning sensor

A dedicated vacuum switch monitors the HEPA H14 filter clogging. An alarm message on the display will indicate that the filter is clogged.



#### Heating system

In the AWD655-8, AWD655-10 and AWD655-15 models the heating elements are inside the chamber and at the bottom of the tank: this allows for direct heat direction.

In the AWD655-2 (and variants) model the water heating elements are positioned outside the wash chamber: this solution avoid water and chemicals to be in contact with the electrical active componets of the heaters.



#### **Coil for facility %** steam

On request, AWD655-10, AWD655-10A and AWD655-15A (and variants) can be equipped with a coil at the bottom of the chamber which is crossed by the mains steam. This speeds up the times required to heat water. It is also possible to use only the coil, excluding the heating elements.



#### Hybrid heating system: HIBRID electric + steam

On request, AWD655-10, AWD655-10A and AWD655-15A (and variants) can be equipped with a hybrid heating system: the water is heated both by the heating elements inside the tank and by the network steam. In this way it is possible to reduce program times and electricity consumption.



#### **Detergent storage** compartment

In the AWD655-2 models, the access to the detergent storage compartment is prevented to unauthorized persons by a locked door. In addition, in the counter top model, cleaning operations are facilitated by a fully removable basket. On the AWD655-8 models with side panel, the detergent storage compartment is located in the side panel with a handle to allow access to it. In the AWD655-10. AWD655-10A and AWD655-15A models the tanks are located in a compartment with locked door at the bottom of the machine.



#### **Chemical dosing** control

The dosing system for chemical products is controlled by a flowmeter. If the flowmeter doesn't perceive the passage of the liquid, after a few seconds the display will show an alarm that warns the operator of the non-dispensing of the liquid in the wash chamber.



#### **Chemical products** level sensor

The machines are equipped with a sensor placed in the suction probe of chemical products, which warn the user if the liquid is running out through a warning that appears on the LCD display.



#### RS232 port connection



#### **USB** port

The two USB ports:

- USB 2 type A for PC USB: allows to connect the machine to a PC for programming;
- USB 2 type B for flash drive: allows to download the history of programs executed and alarms, or for update the firmware and dataset.



## AWD655-2 | AWD655-2XE AWD655-2H

#### Counter top and under the counter

Machines equipped with a manual opening and closing door made in double tempered glass or stainless steel, perfect for dental clinics and hospital ward. The water heating elements, placed outside the wash chamber, ensure a longer life of the system. They are equipped with a system that filter, electrically heat and force, with a powerfull blower, the air in the wash chamber and inside the hollow instruments, to obtain an excellent drying result (not available for the model without drying system). A large variety of accessories completes these machines, suitable for washing and disinfecting all types of surgical instruments and accessories.





#### AWD655-2

Glass door with drying

#### **AWD655-2XE**

Stainless steel door and without drying

#### AWD655-2H

Glass door with drying



Wash chamber with spray arms



Multi filters in the wash chamber



Chemical tanks



External printer connected by cable



HEPA H14 filter and prefilter

Model	AWD655-2	AWD655-2XE	AWD655-2H
Wash chamber dimensions (WxDxH)	428x415x370 mm	428x415x370 mm	428x415x370 mm
wasii chamber dimensions (wxbxn)	(16.9"x16.3"x14.6")	(16.9"x16.3"x14.6")	(16.9"x16.3"x14.6")
Wash chamber volume	65 lt (17 US gal)	65 lt (17 US gal)	65 lt (17 US gal)
Wash chamber material	AISI 316L (EN 1.4404)	AISI 316L (EN 1.4404)	AISI 316L (EN 1.4404)
Indicative weight	65 Kg (143 lbs)	65 Kg (143 lbs)	75 Kg (165 lbs)
Max pump flow rate	100 l/min (0.3 GPM)	100 l/min (0.3 GPM)	100 l/min (0.3 GPM)
Max drying fan flow rate	40 m³∕h	×	40 m³/h
Max number of dosing pumps for chemicals with flowmeters	2	2	3
Chemical tanks capacity	0.6 l (0.2 US gal)	0.6 l (0.2 US gal)	5 l (1 US gal)
Communication ports	2 pcs USB for PC and FLASH DRIVE; 1 pc RS232	2 pcs USB for PC and FLASH DRIVE; 1 pc RS232	2 pcs USB for PC and FLASH DRIVE; 1 pc RS232
1x Control panel with 3.5" LCD display	✓	✓	✓
Single manual door with interlock	$\checkmark$	$\checkmark$	$\checkmark$
Forced air drying	$\checkmark$	×	$\checkmark$
HEPA H14 filter	✓	×	✓
Cold water connection	$\checkmark$	✓	✓
Deionized water connection	•	•	•
Water softener system	•	•	•
Conductivity probe	•	•	•
Spray arm monitor	•	•	•
Wash chamber LED light	•	•	•
Printer	•	•	•
Standards	EN ISO 15883, MDD, IEC, UL, EMC	EN ISO 15883, MDD, IEC, UL, EMC	EN ISO 15883, MDD, IEC, UL, EMC

## External dimensions

#### AWD655-2 | AWD655-2XE

WxDxH: 595x520x600 mm (23.4"x20.5"x23.6")

#### AWD655-2H

WxDxH: 595x520x818 mm (23.4"x20.5"x32.2")

✓ Standard

On request

x Not available

The reference values are based on standard model.

## AWD655-8 | AWD655-8E AWD655-8X | AWD655-XE

#### Under the counter

Machines equipped with a manual door made in double tempered glass or stainless steel, with up to 4 levels for washing trolleys. They are equipped with a system that filter, electrically heat and force, with a powerfull blower, the air in the wash chamber and inside the hollow instruments, to obtain an excellent drying result (not available in the model without drying system). A large variety of accessories completes these machines, suitable for washing and disinfecting all types of surgical instruments and accessories.





































AWD655-8

Glass door with drying

AWD655-8E

Glass door without drying



Stainless steel door with drying

AWD655-8X

Stainless steel door without drying

AWD655-8XE



Wash chamber with spray arms



Multi filters in the wash chamber



Stainless steel support for chemical tanks



External printer connected by cable



HEPA H14 filter and prefilter

Model	AWD655-8	AWD655-8E	AWD655-8X	AWD655-8XE
Wash chamber dimensions (WxDxH)	550x500x600 mm	550x500x600 mm	550x500x600 mm	550x500x600 mm
	(21.7"x19.7"x23.6")	(21.7"x19.7"x23.6")	(21.7"x19.7"x23.6")	(21.7"x19.7"x23.6")
Wash chamber volume	165 lt (43.6 US gal)			
Wash chamber material	AISI 316L (EN 1.4404)	AISI 316L (EN 1.4404)	AISI 316L (EN 1.4404)	AISI 316L (EN 1.4404
Indicative weight	100 Kg (220 lbs)			
Max pump flow rate	370 l/min (97.8 GPM)	370 l/min (97.8 GPM)	370 l/min (97.8 GPM)	370 l/min (97.8 GPN
Max drying fan flow rate	150 m³/h	150 m³/h	150 m³/h	×
Max number of dosing pumps for chemicals with flowmeters	4	4	4	4
Chemical tanks capacity	5 l (1 US gal)			
Communication ports	2 pcs USB for PC and FLASH DRIVE; 1 pc RS232	2 pcs USB for PC and FLASH DRIVE; 1 pc RS232	2 pcs USB for PC and FLASH DRIVE; 1 pc RS232	2 pcs USB for PC and FLASH DRIVE; 1 pc RS232
1x Control panel with 3.5" LCD display	✓	✓	✓	✓
Single manual door with interlock	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Forced air drying	$\checkmark$	×	$\checkmark$	×
HEPA H14 filter	$\checkmark$	×	$\checkmark$	×
Cold water connection	✓	✓	✓	✓
Hot water connection	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Deionized water connection	•	•	•	•
Water softener system	•	•	•	•
Conductivity probe	•	•	•	•
Spray arm monitor	•	•	•	•
Wall drain pump	•	•	•	•
Wash chamber LED light	•	•	•	•
Printer	•	•	•	•
Standards	EN ISO 15883, MDD, IEC, UL, EMC	EN ISO 15883, MDD, IEC, UL, EMC	EN ISO 15883, MDD, IEC, UL, EMC	EN ISO 15883, MDD IEC, UL, EMC

## **■** External dimensions

AWD655-8 | AWD655-8E AWD655-8X | AWD655-8XE

WxDxH: 600x650x845 mm (23.6"x25.6"x33.3")





× Not available

## AWD655-8L | AWD655-8L-SC **AWD655-8XL | AWD655-8XEL**

#### Under the counter

Machines equipped with a side compartment for inserting the detergent tanks and a manual door made in double tempered glass or stainless steel, with up to 4 levels for washing trolleys. They are equipped with a system that filter, electrically heat and force, with a powerfull blower, the air in the wash chamber and inside the hollow instruments, to obtain an excellent drying result (not available in the model without drying system). A large variety of accessories completes these machines, suitable for washing and disinfecting all types of surgical instruments and accessories.









































AWD655-8L

Glass door with drying

AWD655-8L-SC

Glass door, with drying and boiler



Stainless steel door with drying

AWD655-8XL

Stainless steel door AWD655-8XEL without drying



Wash chamber with spray arms



Multi filters in the wash chamber



Stainless steel support for chemical tanks



Built-in printer



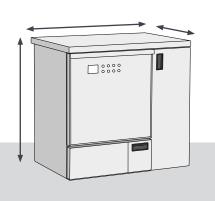
HEPA H14 filter and prefilter

Model	AWD655-8L	AWD655-8L-SC	AWD655-8XL	AWD655-8XEL
Wash chamber dimensions (WxDxH)	550x500x600 mm	550x500x600 mm	550x500x600 mm	550x500x600 mm
wasii chamber dimensions (wxbxii)	(21.7"x19.7"x23.6")	(21.7"x19.7"x23.6")	(21.7"x19.7"x23.6")	(21.7"x19.7"x23.6")
Wash chamber volume	165 lt (43.6 US gal)			
Wash chamber material	AISI 316L (EN 1.4404)			
Indicative weight	115 Kg (254 lbs)	120 Kg (265 lbs)	115 Kg (254 lbs)	115 Kg (254 lbs)
Max pump flow rate	370 l/min (97.8 GPM)			
Max drying fan flow rate	150 m³/h	150 m³∕h	150 m³∕h	×
Max number of dosing pumps for chemicals with flowmeters	4	4	4	4
Chemical tanks capacity	5 l (1 US gal)			
Communication ports	2 pcs USB for PC and FLASH DRIVE; 1 pc RS232	2 pcs USB for PC and FLASH DRIVE; 1 pc RS232	2 pcs USB for PC and FLASH DRIVE; 1 pc RS232	2 pcs USB for PC and FLASH DRIVE; 1 pc RS232
1x Control panel with 3.5" LCD display	✓	✓	✓	✓
Single manual door with interlock	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Forced air drying	✓	✓	✓	×
HEPA H14 filter	✓	✓	✓	×
Cold water connection	✓	✓	✓	✓
Hot water connection	✓	✓	✓	✓
Deionized water connection	•	•	•	•
Water softener system	•	•	•	•
Boiler for deionized water	×	$\checkmark$	×	×
Conductivity probe	•	•	•	•
Spray arm monitor	•	•	•	•
Wall drain pump	•	•	•	•
Wash chamber LED light	•	•	•	•
Printer	•	•	•	•
Standards	EN ISO 15883, MDD, IEC, UL, EMC			

## **■** External dimension

AWD655-8L | AWD655-8L-SC AWD655-8XL | AWD655-8XEL

WxDxH: 900x650x845 mm (35.4"x25.6"x33.3")



✓ Standard

On request

× Not available

## AWD655-10 | AWD655-10-SC AWD655-10-2SC

#### Freestanding column

Machines equipped with a manual door made in double tempered glass, for surgical departments and small sterilization departments with 5 washing levels. They are equipped with a system that filter, electrically heat and force, with a powerfull blower, the air in the wash chamber and inside the hollow instruments, to obtain an excellent drying result. To ease the loading and unloading of the trolleys, special manual transport trolleys can be used. A large variety of accessories completes these machines, suitable for washing and disinfecting all types of surgical instruments and accessories.









































#### AWD655-10

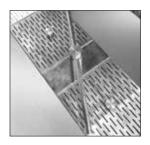
Glass door with drying

#### AWD655-10-SC

Glass door with drying and boiler

#### AWD655-10-2SC

Glass door with drying and 2 boiler



Wash chamber with spray arms



Touch control panel



Chemical tanks



Built-in printer



HEPA H14 filter and prefilter

Model code	AWD655-10	AWD655-10-SC	AWD655-10-2SC
Wash chamber dimensions (WxDxH)	560x590x800 mm	560x590x800 mm	560x590x800 mm
wash chamber differsions (wxbxn)	(22"x23"x31.5")	(22"x23"x31.5")	(22"x23"x31.5")
Wash chamber volume	265 lt (70 US gal)	265 lt (70 US gal)	265 lt (70 US gal)
Wash chamber material	AISI 316L (EN 1.4404)	AISI 316L (EN 1.4404)	AISI 316L (EN 1.4404)
Indicative weight	240 Kg (529 lbs)	255 Kg (562 lbs)	270 Kg (595 lbs)
Max pump flow rate	600l/min (158.5 GPM)	600l/min (158.5 GPM)	600l/min (158.5 GPM)
Max drying fan flow rate	150 m³/h	150 m³∕h	150 m³/h
Max number of dosing pumps for chemicals with flowmeters	4	4	4
Chemical tanks capacity	5 l (1 US gal)	5 l (1 US gal)	5 l (1 US gal)
Communication ports	2 pcs USB for PC and FLASH DRIVE; 1 pc RS232	2 pcs USB for PC and FLASH DRIVE; 1 pc RS232	2 pcs USB for PC and FLASH DRIVE; 1 pc RS232
1x Control panel with 3.5' LCD display	$\checkmark$	$\checkmark$	$\checkmark$
Single manual door with interlock	$\checkmark$	$\checkmark$	$\checkmark$
Forced air drying	✓	✓	✓
HEPA H14 filter	✓	✓	✓
Cold water connection	✓	✓	✓
Hot water connection	✓	$\checkmark$	$\checkmark$
Deionized water connection	•	•	•
Water softener system	•	•	•
Boiler for deionized water	×	$\checkmark$	$\checkmark$
Boiler for hot water	×	×	✓
Conductivity probe	•	•	•
Spray arm monitor	•	•	•
Coil for facility steam	•	•	•
Hybrid heating system: electric- steam	•	•	•
Wall drain pump	•	•	•
(E.T.S.) Empty Total System	•	•	•
Wash chamber LED light	•	•	•
Automatic washing trolley recognition	•	•	•
Printer	•	•	•
Standards	EN ISO 15883, MDD, IEC, UL, EMC	EN ISO 15883, MDD, IEC, UL, EMC	EN ISO 15883, MDD, IEC, UL, EMC

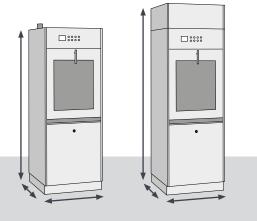
## **■** External dimension

#### AWD655-10

WxDxH: 650x670x1850 mm (25.6"x26.4"x72.8")

#### AWD655-10-SC | AWD655-10-2SC

WxDxH: 650x670x2200 mm (25.6"x26.4"x86.6")



✓ Standard

On request

× Not available

The reference values are based on standard model.

## AWD655-10D | AWD655-10D-SC AWD655-10D-2SC

#### Freestanding column

Machines equipped with pass-through manual door made in double tempered glass, for surgical departments and small sterilization departments with 5 washing levels. In the machine with two doors, on one side the trolley is loaded with the dirty instruments (dirty room), on the other side the trolley is taken with the cleaned and disinfected instruments (clean room), at the end of the cycle. They are equipped with a system that filter, electrically heat and force, with a powerfull blower, the air in the wash chamber and inside the hollow instruments, to obtain an excellent drying result. To ease the loading and unloading of the trolleys, special manual transport trolleys can be used. A large variety of accessories completes these machines, suitable for washing and disinfecting all types of surgical instruments and accessories.





Pass-through glass

door with drying



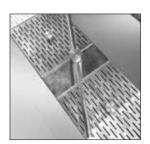


Pass-through glass door with drying and boiler



AWD655-10D-2SC

Pass-through glass door with drying and 2 boiler



Wash chamber with spray arms



Touch control panel



Chemical tanks



Built-in printer



HEPA H14 filter and prefilter

Model	AWD655-10D	AWD655-10D-SC	AWD655-10D-2SC
Wash chamber dimensions (WxDxH)	560x590x800 mm (22"x23"x31.5")	560x590x800 mm (22"x23"x31.5")	560x590x800 mm (22"x23"x31.5")
Wash chamber volume	265 lt (70 US gal)	265 lt (70 US gal)	265 lt (70 US gal)
Wash chamber material	AISI 316L (EN 1.4404)	AISI 316L (EN 1.4404)	AISI 316L (EN 1.4404)
Indicative weight	240 Kg (529 lbs)	255 Kg (562 lbs)	270 Kg (595 lbs)
Max pump flow rate	600l/min (158.5 GPM)	600l/min (158.5 GPM)	600l/min (158.5 GPM
Max drying fan flow rate	150 m³/h	150 m³/h	150 m³/h
Max number of dosing pumps for chemicals with flowmeters	4	4	4
Chemical tanks capacity	5 l (1 US gal)	5 l (1 US gal)	5 l (1 US gal)
Communication ports	2 pcs USB for PC and FLASH DRIVE; 1 pc RS232	2 pcs USB for PC and FLASH DRIVE; 1 pc RS232	2 pcs USB for PC and FLASH DRIVE; 1 pc RS232
2x Control panel with 3.5" LCD display	$\checkmark$	$\checkmark$	✓
Pass-through manual door with interlock	$\checkmark$	$\checkmark$	$\checkmark$
Forced air drying	✓	✓	✓
HEPA H14 filter	$\checkmark$	$\checkmark$	$\checkmark$
Cold water connection	$\checkmark$	✓	✓
Hot water connection	$\checkmark$	✓	✓
Deionized water connection	•	•	•
Water softener system	•	•	•
Boiler for deionized water	×	$\checkmark$	$\checkmark$
Boiler for hot water	×	×	✓
Conductivity probe	•	•	•
Spray arm monitor	•	•	•
Coil for facility steam	•	•	•
Hybrid heating system: electric- steam	•	•	•
Wall drain pump	•	•	•
(E.T.S.) Empty Total System	•	•	•
Wash chamber LED light	•	•	•
Automatic washing trolley recognition	•	•	•
Printer	•	•	•
Standards	EN ISO 15883, MDD, IEC, UL, EMC	EN ISO 15883, MDD, IEC, UL, EMC	EN ISO 15883, MDD, IEC, UL, EMC

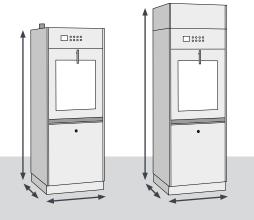
## **■** External dimension

#### AWD655-10D

WxDxH: 650x700x1850 mm (25.6"x27.6"x72.8")

#### AWD655-10D-SC | AWD655-10D-2SC

WxDxH: 650x700x2200 mm (25.6"x27.6"x86.6")





On request

× Not available

## AWD655-10A | AWD655-10A-SC AWD655-10A-2SC

#### Freestanding column

Machines equipped with an automatic sliding door made in double tempered glass, for surgical departments and small sterilization departments with 5 washing levels and a loading capacity of 12 DIN baskets. The automatic sliding door is activated by passing the hand over the optical sensor placed on the control keypad, this avoids the problem of cross-contagion. They are equipped with a system that filter, electrically heat and force, with a powerfull blower, the air in the wash chamber and inside the hollow instruments, to obtain an excellent drying result. To ease the loading and unloading of the trolleys, special manual transport trolleys can be used. The machine is also arranged for automatic loading and unloading system. A large variety of accessories completes these machines, suitable for washing and disinfecting all types of surgical instruments and accessories.





The second boiler allows to reduce hot water loading times and save water by reusing deionized water at the end of disinfection.







































#### AWD655-10A

Glass door with drying

#### AWD655-10A-SC

Glass door with drying and boiler

#### AWD655-10A-2SC

Glass door with drying and 2 boiler



Wash chamber with spray arms



Automatic sliding doors



Optical sensor



Built-in printer



HEPA H14 filter and prefilter

Model	AWD655-10A	AWD655-10A-SC	AWD655-10A-2SC
Wash chamber dimensions (WxDxH)	560x590x800 mm	560x590x800 mm	560x590x800 mm
wasii chamber dimensions (wxbxn)	(22"x23"x31.5")	(22"x23"x31.5")	(22"x23"x31.5")
Wash chamber volume	265 lt (70 US gal)	265 lt (70 US gal)	265 lt (70 US gal)
Wash chamber material	AISI 316L (EN 1.4404)	AISI 316L (EN 1.4404)	AISI 316L (EN 1.4404)
Indicative weight	240 Kg (529 lbs)	255 Kg (562 lbs)	270 Kg (595 lbs)
Max pump flow rate	600l/min (158.5 GPM)	600l/min (158.5 GPM)	600l/min (158.5 GPM)
Max drying fan flow rate	150 m³/h	150 m³∕h	150 m³∕h
Max number of dosing pumps for chemicals with flowmeters	4	4	4
Chemical tanks capacity	5 l (1 US gal)	5 l (1 US gal)	5 l (1 US gal)
Communication ports	2 pcs USB for PC and FLASH DRIVE; 1 pc RS232	2 pcs USB for PC and FLASH DRIVE; 1 pc RS232	2 pcs USB for PC and FLASH DRIVE; 1 pc RS232
1x Control panel with 3.5" LCD display	$\checkmark$	$\checkmark$	$\checkmark$
Single automatic door with interlock	$\checkmark$	$\checkmark$	$\checkmark$
Forced air drying	✓	✓	✓
HEPA H14 filter	$\checkmark$	✓	$\checkmark$
Cold water connection	$\checkmark$	✓	✓
Hot water connection	$\checkmark$	✓	$\checkmark$
Deionized water connection	•	•	•
Water softener system	•	•	•
Boiler for deionized water	×	$\checkmark$	$\checkmark$
Boiler for hot water	×	×	✓
Conductivity probe	•	•	•
Spray arm monitor	•	•	•
Coil for facility steam	•	•	•
Hybrid heating system: electric- steam	•	•	•
Wall drain pump	•	•	•
(E.T.S.) Empty Total System	•	•	•
Wash chamber LED light	•	•	•
Automatic washing trolley recognition	•	•	•
Printer	•	•	•
Standards	EN ISO 15883, MDD, IEC, UL, EMC	EN ISO 15883, MDD, IEC, UL, EMC	EN ISO 15883, MDD, IEC, UL, EMC

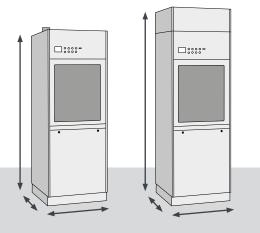
## **■** External dimension

#### AWD655-10A

WxDxH: 680x670x1950 mm (26.8"x26.4"x76.8")

#### AWD655-10A-SC | AWD655-10A-2SC

WxDxH: 680x670x2300 mm (26.8"x26.4"x90.6")



✓ Standard

On request

× Not available

The reference values are based on standard model.

## AWD655-10AD | AWD655-10AD-SC AWD655-10AD-2SC

#### Freestanding column

Machines equipped with pass-through automatic sliding door made in double tempered glass, for surgical departments and small sterilization departments with 5 washing levels and a loading capacity of 12 DIN baskets. The automatic sliding door is activated by passing the hand over the optical sensor placed on the control keypad, this avoids the problem of cross-contagion. In the machine with two doors, on one side the trolley is loaded with the dirty instruments (dirty room), on the other side the trolley is taken with the cleaned and disinfected instruments (clean room), at the end of the cycle. To ease the loading and unloading of the trolleys, special manual transport trolleys can be used. The machine is also arranged for automatic loading and unloading system. A large variety of accessories completes these machines, suitable for washing and disinfecting all types of surgical instruments and accessories.



#### **REDUCE TIME & SAVE WATER!**

The second boiler allows to reduce hot water loading times and save water by reusing deionized water at the end of disinfection.









































#### AWD655-10AD

Glass door with drying

#### AWD655-10AD-SC

Glass door with drying and boiler

#### AWD655-10AD-2SC

Glass door with drying and 2 boiler



Wash chamber with spray arms



Automatic sliding doors



Optical sensor



Built-in printer



HEPA H14 filter and prefilter

Model	AWD655-10AD	AWD655-10AD-SC	AWD655-10AD-2SC
Wash chamber dimensions (WxDxH)	560x590x800 mm (22"x23"x31.5")	560x590x800 mm (22"x23"x31.5")	560x590x800 mm (22"x23"x31.5")
Wash chamber volume	265 lt (70 US gal)	265 lt (70 US gal)	265 lt (70 US gal)
Wash chamber material	AISI 316L (EN 1.4404)	AISI 316L (EN 1.4404)	AISI 316L (EN 1.4404)
Indicative weight	240 Kg (529 lbs)	255 Kg (562 lbs)	270 Kg (595 lbs)
Max pump flow rate	600l/min (158.5 GPM)	600l/min (158.5 GPM)	600l/min (158.5 GPM)
Max drying fan flow rate	150 m³/h	150 m³/h	150 m³/h
Max number of dosing pumps for chemicals with flowmeters	4	4	4
Chemical tanks capacity	5 l (1 US gal)	5 l (1 US gal)	5 l (1 US gal)
Communication ports	2 pcs USB for PC and FLASH DRIVE; 1 pc RS232	2 pcs USB for PC and FLASH DRIVE; 1 pc RS232	2 pcs USB for PC and FLASH DRIVE; 1 pc RS232
1x Control panel with 3.5" LCD display	$\checkmark$	$\checkmark$	$\checkmark$
Pass-through automatic door with interlock	$\checkmark$	$\checkmark$	$\checkmark$
Forced air drying	$\checkmark$	✓	✓
HEPA H14 filter	$\checkmark$	✓	✓
Cold water connection	$\checkmark$	✓	$\checkmark$
Hot water connection	$\checkmark$	✓	✓
Deionized water connection	•	•	•
Water softener system	•	•	•
Boiler for deionized water	×	✓	✓
Boiler for hot water	×	×	$\checkmark$
Conductivity probe	•	•	•
Spray arm monitor	•	•	•
Coil for facility steam	•	•	•
Hybrid heating system: electric- steam	•	•	•
Wall drain pump	•	•	•
(E.T.S.) Empty Total System	•	•	•
Wash chamber LED light	•	•	•
Automatic washing trolley recognition	•	•	•
Printer	•	•	•
Standards	EN ISO 15883, MDD, IEC, UL, EMC	EN ISO 15883, MDD, IEC, UL, EMC	EN ISO 15883, MDD, IEC, UL, EMC

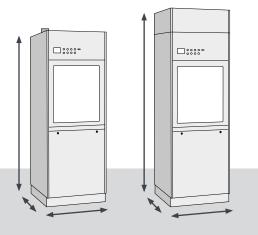
## **■** External dimension

#### AWD655-10AD

WxDxH: 680x700x1950 mm (26.8"x27.6"x76.8")

#### AWD655-10AD-SC | AWD655-10AD-2SC

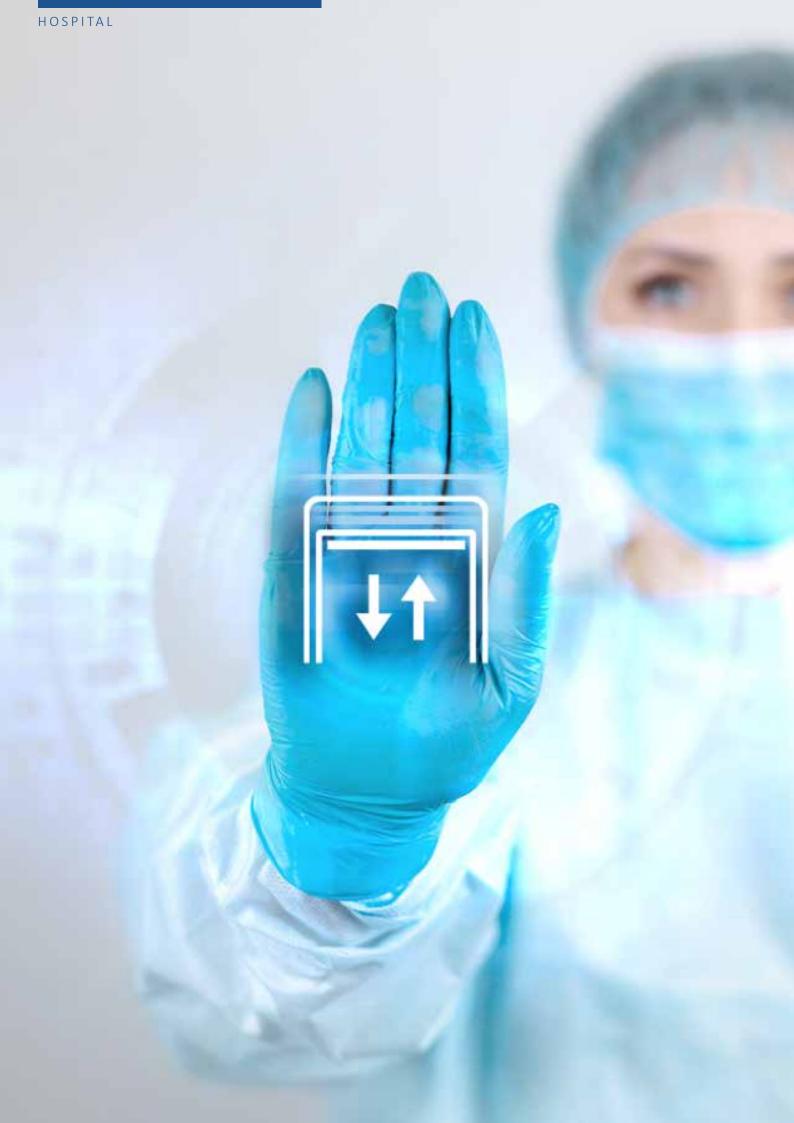
WxDxH: 680x700x2300 mm (26.8"x27.6"x90.6")





On request

× Not available





## HYGIENE, SAFETY AND TOTAL DISINFECTION

# Eliminates any risk of contamination to operators!

Available only on AWD655-10A (and variants)

The optical sensor ensures total protection of surfaces and helps to stop the spread of viruses.

## Passing the hand, remotely, in front of the optical sensor, the operator can open and close the door.

Thanks to the sensor, the operators' hands will never come into contact with the machine, preventing the surfaces of the machine from bacterial growth.

#### REDUCE TIME & SAVE WATER!

The second boiler allows to reduce hot water loading times and save water by reusing deionized water at the end of disinfection.

## AWD655-15A | AWD655-15A-SC AWD655-15A-2SC | AWD655-15A-3SC

### Freestanding column

Machines equipped with automatic sliding door made in double tempered glass, for big sterilization departments with 6 washing levels for a loading capacity of 18 DIN baskets. The models are equipped with a touch control panel with 8 backlit keys and a 7" touch-screen display. The machine is provided with 2 washing pumps: one allows water to flow out of the impellers into the tank, and the second engages the trolleys to wash the instruments via impellers or injectors. A system of filtered air, electrically heated and pushed into the washing chamber and inside the hollow instruments, provides excellent drying results. To ease the loading and unloading of the trolleys, special manual transport trolleys can be used. The machine is also arranged for automatic loading and unloading system. A large variety of accessories completes these machines, suitable for washing and disinfecting all types of surgical instruments and accessories.







































Available model
AWD655-15A-3SC with
a third boiler with cold
water, to speed up
the washing process!



#### AWD655-15A

Glass door with drying

#### AWD655-15A-SC

Glass door with drying and boiler

#### AWD655-15A-2SC

Glass door with drying and 2 boiler



Wash chamber with spray arms



Automatic sliding doors



Built-in printer



HEPA H14 filter and prefilter

Model	AWD655-15A	AWD655-15A-SC	AWD655-15A-2SC	AWD655-15A-3SC
Wash chamber dimensions (WxDxH)	680x790x800 mm (26.8"x31.1"x31.5")	680x790x800 mm (26.8"x31.1"x31.5")	680x790x800 mm (26.8"x31.1"x31.5")	680x790x800 mm (26.8"x31.1"x31.5")
Wash chamber volume	430 lt (114 US gal)			
Wash chamber material	AISI 316L (EN 1.4404)			
Indicative weight	460 Kg (1014 lbs)	480 Kg (1058 lbs)	500 Kg (1102 lbs)	520 Kg (1146 lbs)
Max chamber pump flow rate	600 l/min (158.5 GPM)			
Max trolley pump flow rate	400 l/min (105.6 GPM)			
Max drying fan flow rate	300 m³∕h	300 m³/h	300 m³/h	300 m³∕h
Max number of dosing pumps for chemicals with flowmeters	5	5	5	5
Chemical tanks capacity	5 l (1 US gal)			
Communication ports	2 pcs USB for PC and FLASH DRIVE; 1 pc RS232	2 pcs USB for PC and FLASH DRIVE; 1 pc RS232	2 pcs USB for PC and FLASH DRIVE; 1 pc RS232	2 pcs USB for PC and FLASH DRIVE; 1 pc RS232
1x Control panel with 7"LCD display	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Single automatic door with interlock	✓	✓	✓	✓
Forced air drying	$\checkmark$	✓	✓	$\checkmark$
HEPA H14 filter	✓	✓	✓	✓
Cold water connection	✓	✓	✓	✓
Hot water connection	<b>√</b>	<u>√</u>	<b>√</b>	<b>√</b>
Deionized water connection	•	<u> </u>	<u> </u>	<u> </u>
Water softener system	•	•	•	•
Boiler for deionized water	<b>x</b>	✓	✓	✓
Boiler for hot water	<b>x</b>		<u>√</u>	<b>√</b>
Boiler for cold water	<u> </u>	*	<u> </u>	<u> </u>
Conductivity probe	•	•	•	•
Spray arm monitor	•	•	•	•
Coil for facility steam	•	•	•	•
Hybrid heating system: electric- steam	•	•	•	•
Wall drain pump	•	•	•	•
(E.T.S.) Empty Total System	•	•	•	•
Wash chamber LED light	•	•	•	•
Automatic washing trolley recognition	•	•	•	•
Printer	•	•	•	•
Standards	EN ISO 15883, MDD, IEC, UL, EMC			

## **■** External dimension

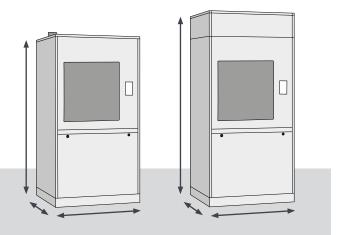
#### AWD655-15A

WxDxH: 1000x860x1900 mm (39.4"x33.9"x74.8")

## AWD655-15A-SC | AWD655-15A-2SC AWD655-15A-3SC

WxDxH: 1000x860x2300 mm (39.4"x33.9"x90.6")

The reference values are based on standard model.



✓ Standard

On request

x Not available

#### **REDUCE TIME & SAVE WATER!**

The second boiler allows to reduce hot water loading times and save water by reusing deionized water at the end of disinfection.

## AWD655-15AD | AWD655-15AD-SC AWD655-15AD-2SC | AWD655-15AD-3SC

#### Freestanding column

Machines equipped with pass-through automatic sliding door made in double tempered glass, for big sterilization departments with 6 washing levels for a loading capacity of 18 DIN baskets. Double doors allow to load dirty instrument on one side (dirty room), and unload cleaned and disinfected instruments on the other side (clean room) at the end of the cycle. The touch control panel has a 7" display on the entry side and a 3.5" display on the exit side (on request a second 7" display can be installed). The machine is provided with 2 washing pumps: one allows water to flow out of the impellers into the tank, and the second engages the trolleys to wash the instruments via impellers or injectors. A system of filtered air, electrically heated and pushed into the washing chamber and inside the hollow instruments, provides excellent drying results. To ease the loading and unloading of the trolleys, special manual transport trolleys can be used. The machine is also arranged for automatic loading and unloading system. A large variety of accessories completes these machines, suitable for washing and disinfecting all types of surgical instruments and accessories.













































#### AWD655-15AD

Glass door with drying

#### AWD655-15AD-SC

Glass door with drying and boiler

#### AWD655-15AD-2SC

Glass door with drying and 2 boiler



Wash chamber with spray arms



Automatic sliding doors



Built-in printer



HEPA H14 filter and prefilter

Model	AWD655-15AD	AWD655-15AD-SC	AWD655-15AD-2SC	AWD655-15AD-3SC
Wash chamber dimensions (WxDxH)	680x790x800 mm (26.8"x31.1"x31.5")	680x790x800 mm (26.8"x31.1"x31.5")	680x790x800 mm (26.8"x31.1"x31.5")	680x790x800 mm (26.8"x31.1"x31.5")
Wash chamber volume	430 lt (114 US gal)			
Wash chamber material	AISI 316L (EN 1.4404)			
Indicative weight	460 Kg (1014 lbs)	480 Kg (1058 lbs)	500 Kg (1102 lbs)	520 Kg (1146 lbs)
Max chamber pump flow rate	600 l/min (158.5 GPM)	600 l/min (158.5 GPM)	600 l/min (158.5 GPM)	600 l/min (158.5 GPM
Max trolley pump flow rate	400 l/min (105.6 GPM)	400 l/min (105.6 GPM)	400 l/min (105.6 GPM)	400 l/min (105.6 GPM
Max drying fan flow rate	300 m³/h	300 m³/h	300 m³/h	300 m³/h
Max number of dosing pumps for chemicals with flowmeters	5	5	5	5
Chemical tanks capacity	5 l (1 US gal)			
Communication ports	2 pcs USB for PC and FLASH DRIVE; 1 pc RS232	2 pcs USB for PC and FLASH DRIVE; 1 pc RS232	2 pcs USB for PC and FLASH DRIVE; 1 pc RS232	2 pcs USB for PC and FLASH DRIVE; 1 pc RS232
1x Control panel with 7" touch display	<b>✓</b>	✓	✓	✓
1x Control panel with 3,5" LCD display	<b>√</b>	✓	✓	$\checkmark$
Pass-through automatic door with interlock	✓	✓	✓	✓
Forced air drying	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
HEPA H14 filter	✓	✓	✓	✓
Cold water connection	✓	✓	✓	✓
Hot water connection	✓	✓	✓	✓
Deionized water connection	•	•	•	•
Water softener system	•	•	•	•
Boiler for deionized water	×	✓	✓	✓
Boiler for hot water	×	×	✓	✓
Boiler for cold water	×	*	•	•
Conductivity probe	•	•	•	•
Spray arm monitor	•	•	•	•
Coil for facility steam	•	•	•	•
Hybrid heating system: electric- steam	•	•	•	•
Wall drain pump	•	•	•	•
(E.T.S.) Empty Total System	•	•	•	•
Wash chamber LED light	•	•	•	•
Automatic washing trolley recognition	•	•	•	•
Printer	•	•	•	•
	EN ISO 15883, MDD,			

## **■** External dimension

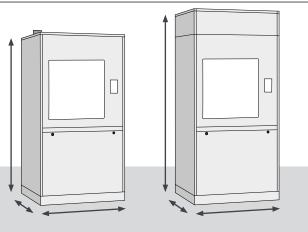
AWD655-15AD

WxDxH: 1000x900x1900 mm (39.4"x35.4"x74.8")

AWD655-15AD-SC | AWD655-15AD-2SC AWD655-15AD-3SC

WxDxH: 1000x900x2300 mm (39.4"x35.4"x90.6")

(39.4 x35.4 x90.6 )



On request

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× Not available

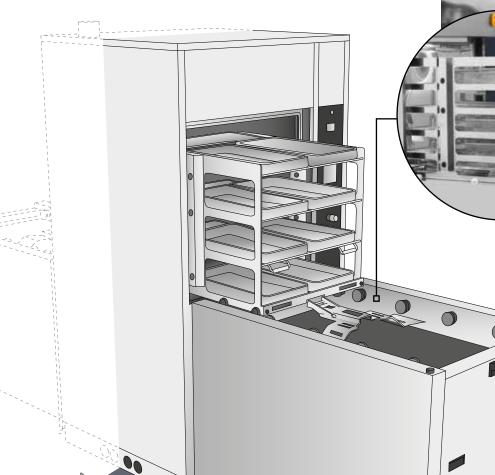
FOR AWD655-10A AND AWD655-15A (and variants)

# Automatic Loading and Unloading system

Automatic loading and unloading system that allows to speed up and simplify workflows in big sterilization departments

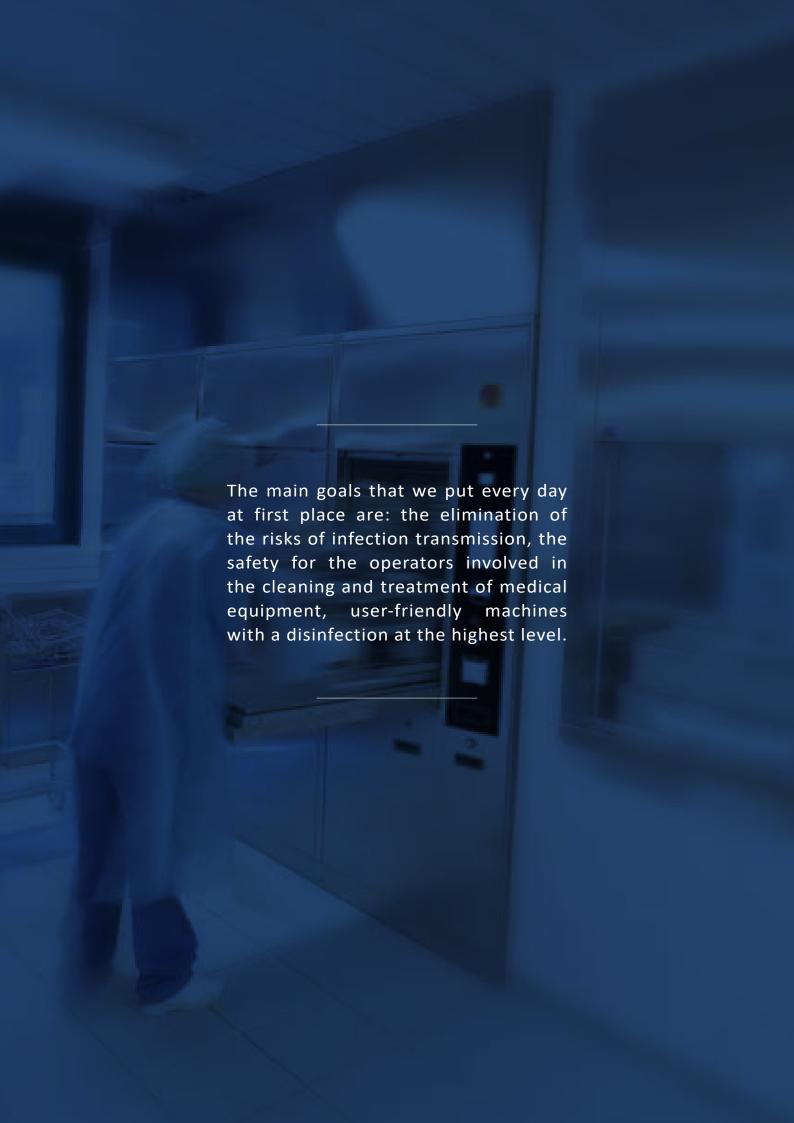
The loading and unloading operations are easy and intuitive: the washing trolley is automatically transported in front of the door, which, if the device is free, automatically opens. The trolley is pushed in the washing chamber, the door closes and the specific cycle for the inserted trolley starts. When the cycle is complete, the unloading door opens and, if the unloading system is free, the trolley is pulled out.

The system is modular, to adapt to every kind of department configuration, and can store up to 3 trolleys both on the loading and on the unloading zone. If that is the case, of course, a controller takes care of avoiding any kind of impact between trolleys.



Modular system, which can store **up to 3 trolleys**, both in the loading and unloading zone.

\*Useable on AWD-655-15 \*Useable on AWD-655-10A



## **AWD655 Trolley and Accessories**



#### Standard washing basket

Washing basket, basic version. Designed for various inserts and accessories.



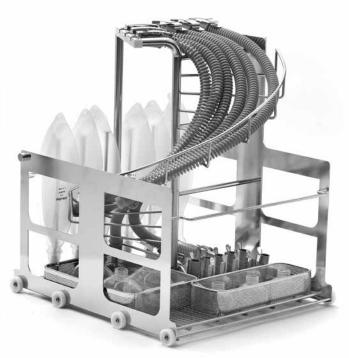
### 5 level washing trolley

Washing trolley with spray arms and 5 levels. Suitable for washing large quantities of surgical instruments.



### Mini invasive washing trolley

3 levels washing trolley with spray arms and 36 positions (9 luer locks + 9 silicon pipes + 18 guard connections for tubular hollow instruments with diameter of 3-7 mm) for washing universal mini invasive surgery instruments.



## **Anesthesia washing trolley**

Washing trolley for washing anesthesia instruments.



## Da Vinci washing trolley

Washing trolley for Da Vinci instruments Si-Xi series to use with Da Vinci connection kits.



# Operating room shoes washing trolley

Washing trolley with support for washing operating room shoes. Suitable for washing up to 32 rubber shoes (16 pairs).



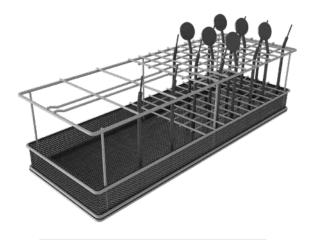
## **Containers washing trolley**

Washing trolley for containers and trays.

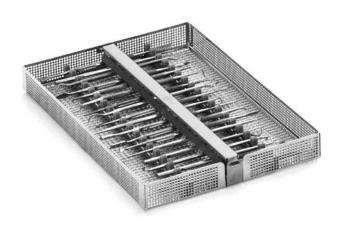


## **Transfering trolley**

Loading trolley with block system to load washing trolley into the machines.



Insert for washing vertical instruments



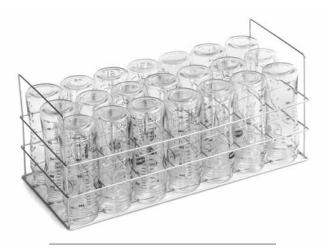
Basket with two silicone supports



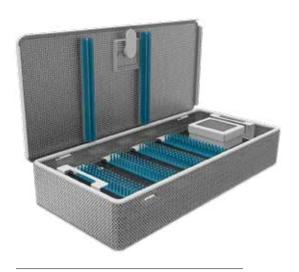
Insert for washing trays and cassettes



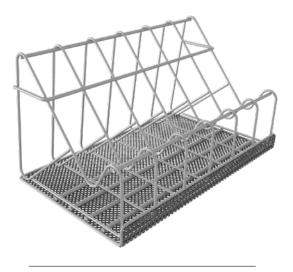
Basket for washing teats and rings for biberon



Basket for washing biberon



Ophtalmic basket with lid



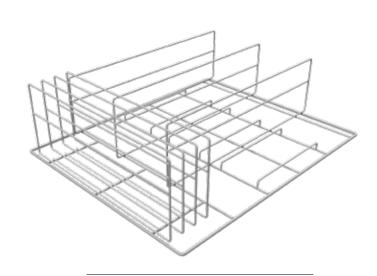
Basket for washing speculus



Standard DIN basket with handle for washing medium-sized instruments



Insert for washing flexible pipe and anaesthetic baloons



Insert for washing containers

CE

#### MORE TROLLEY, INSERTS AND ACCESSORIES AVAILABLE

Want to know all the trolley, inserts and accessories?

Contact us to get the accessories catalogue with all the details!

info@at-os.com



HOSPITAL

DENTAL

LABORATORY

RETIREMENT HOMES

STAINLESS STEEL FORNITURE



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