

Your Health, our Technology



AF2 PROFESSIONAL LINE

Washer disinfector
for human waste containers



Professionalism guaranteed all over the world for more than 50 years

AT-OS, acknowledged as an international leader and EN ISO 13485 certified, designs, manufactures and distributes machines for washing and disinfecting human waste containers, such as bedpans, urinals, supports for disposable bedpans, commodes, kidney-shaped basins, bowls, urology bottles, bottles for blood collection and other containers used in hospitals, homes for the elderly, healthcare and clinics. AT-OS products provide innovative technology in constant evolution. The AF2 machines are produced in compliance with the EC 93/42 EUROPEAN DIRECTIVE for class 2A medical devices, guaranteeing high quality and a high level of safety. Total compliance with the European standards regarding machines for washing and disinfection: EN 15883 part 1 and part 3.



The plumbing system is DVGW certified and isolates the drinking water pipeline system as prescribed by the European Standard EN1717 in order to avoid any risk of contamination.



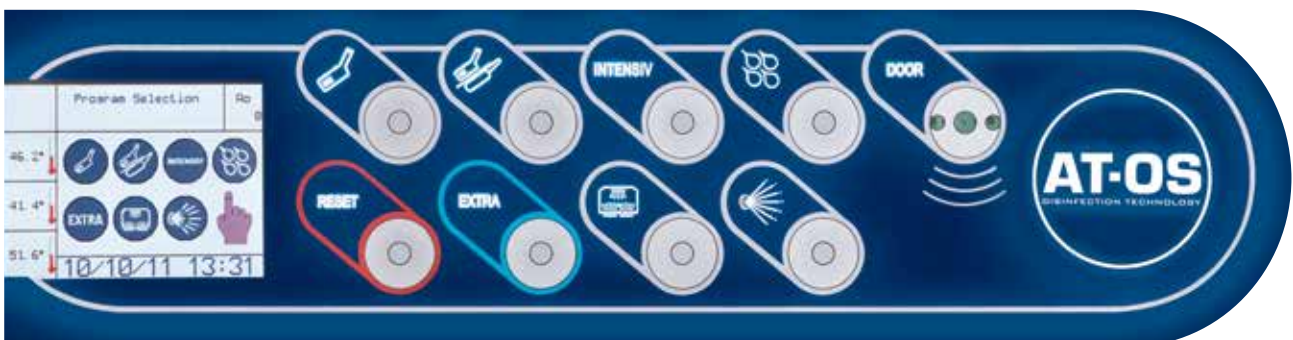
AT-OS machines are characterised by flexibility of use, customised programs based on operator needs and a digital warning system for routine maintenance.

AT-OS gives mindful and expert after-sales technical service, guaranteeing on-site intervention whenever necessary and

scheduling training sessions for employees in the health sector, in order to guarantee the correct use of the machines.



Training centre



Contamination risk reduction

One of the biggest problems that has to be eliminated in hospitals is the transmission of infection from one patient to another due to poorly cleaned containers.

Hygiene, safety, total practicality and disinfection at high levels

are the goals achieved by the entire range of AF2 machines that represent an high technological standard in the field.

The contamination risk for both users and patients is reduced, thanks to the automatic door closure system, automatic emptying of the containers in a sealed chamber, cleaning and disinfection.

The door opens only after the

cycle is completed.

A safety device ensures that the door remains closed during the disinfection phase, thus avoiding premature opening of the door and possible contamination.

Thanks to the AT-OS technology, during each thermal disinfection cycle **the machine automatically calculates the disinfection value A0, set by AT-OS at 300**: this must never be lower than 60.

This value is constantly updated during the cycle and monitored until the start of the following process.



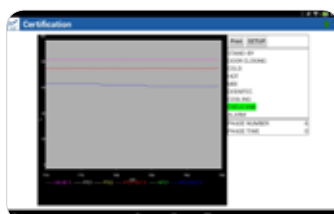
The machine can be programmed and monitored through a Windows PC, installing the **WinATOSMonitor** software and connecting it to the machine with a USB cable. Alternatively, **AT-OS APP AF2** can be installed on Android devices such as tablets or smartphones, to connect to the device without wires in a more convenient and faster way.



AT-OS APP AF2



The user-friendly application, for Android tablets and smartphones, **simplifies and speeds up** machine monitoring and programming with PDF AND EXCEL **reports**, that can be downloaded directly on your device.



High-Tech Features of the AF2 Professional line



OPTIONAL



DWC - Disinfected Water Cooling

Automated system for prompt disinfection of the water used in the final rinse to lower the washing chamber temperature before being flushed to ensure freedom from microbial contamination according to the standard EN ISO 15883-1 p. 5.3.2.5.



ETS - Emptying Total System

System to automatically drain water at the end of each cycle from the water pump, the water storage tank and the pipes in order to ensure freedom from microbial contamination inside the machine. According to the standard EN ISO 15883-1 5.3.2.1 & 5.5.1.1



SDS - Self Disinfection System

Function that allows the machine to automatically perform a disinfection program 24 hours after the last cycle. This system prevents bacterial growth inside the machine.



DCS - Drain Control System

Safety device that prevents the use of the machine if the drain trap is clogged.



HANDS FREE STARTING

The user can start the machine without removing his gloves by pushing buttons with his elbow.

This feature also prevents cross infection.



AUTOMATIC DOOR OPENING

The operator can open and close the door by pushing the foot pedal or by activating the optical sensor on the touch panel.



DVS - Disinfection Validation System

3 PT1000 temperature probes in the washing chamber to ensure accurate disinfection monitoring.





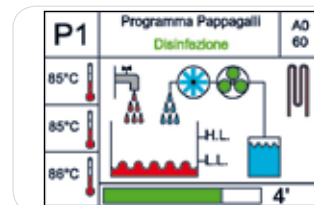
High load capacity

Up to 4 urine bottles can be disinfected at once using device.



EHMI - Easy Human-Machine Interface

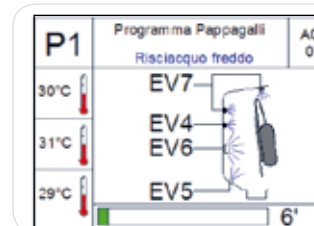
Graphic display for easy communication between machine and user.
Top technology display to ensure detailed and clear information during operation and instructions in case of alarm.



ENC

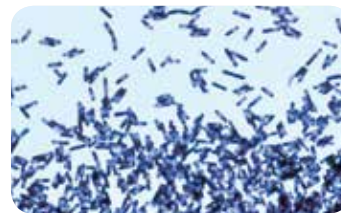
ENC - Electronic Nozzles Control

Intelligent and optimised control of water flow, pressure and injection system to improve the washing performance.



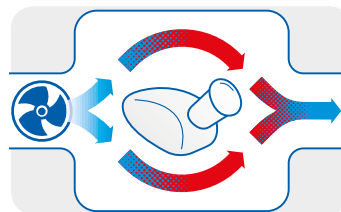
HDS© - High Disinfection System

Special ©AT-OS program with direct detergent spraying appliance and the possibility to set the cleaning action time of the detergent to increase the cleaning efficiency. Test approved by the University of Bonn (Germany).



ACS - Air Cooling System

After the disinfection phase, cold air is introduced by a fan in the washing chamber, to lower the internal temperature and partially dry the disinfected containers. By condensing the excess steam, it prevents the AEROSOL effect for the operator and the thermodynamic contamination of the room



Multiwasher Function

Complete application for washing and disinfecting other utensils and containers that cannot be treated in a standard support for bedpans and urinals. See more details on page 11.



At-OS APP AF2 with bluetooth application

The user-friendly application, for Android tablets and smartphones, simplifies and speeds up machine monitoring and programming with on-line improvement updates. The connection between AT-OS machines and Android device can be done without wires, requesting a bluetooth application, or via a USB connection with a special adaptor.



The Professional Line product range

AF2-60

Dimensions: WxDxH mm



AF2.60P Stand alone

Column floor mounted with plinth and wall or floor drain trap connection. Thermal disinfection with built-in steam generator.

► Dimensions 600 x 450 x 1650



AF2.60M Wall-hung

Wall-hung, mounted with wall fixing support brackets and wall drain trap connection. Thermal disinfection with built-in steam generator.

► Dimensions 600 x 450 x 1550



AF2.60I Wall built-in

Wall built-in with assembly frame and drain trap connection. Thermal disinfection with built-in steam generator.

► Visible front dimensions
720 x 1835



AF2.60I/WC

Wall built-in with WC

Wall built-in with assembly frame, complete with fixing and rinsing device for the toilet and drain trap connection. Thermal disinfection with built-in steam generator.

► Visible front dimensions
720 x 1835

AF2-90

Dimensions: WxDxH mm



AF2.90B Counter-top

Counter-top floor mounted with plinth and upper work top and wall or floor drain trap connection. Thermal disinfection with built-in steam generator.

► Dimensions 900 x 600 x 1000



AF2.90 970/860 Under-top

Under-top floor mounted with plinth to be placed under a work top and wall or floor drain trap connection. Thermal disinfection with built-in steam generator.

► Dimensions 900 x 600 x *970/860



AF2.90L Counter-top with sink

Counter-top with plinth, complete with upper work top with washbasin and wall or floor drain trap connection. Thermal disinfection with built-in steam generator.

► Dimensions 900 x 600 x 1000



AF2.105P Column stand alone

Column floor mounted, combined sluice unit, complete with slop-sink with plinth and wall or floor drain trap connection. Thermal disinfection with built-in steam generator.

► Dimensions 1050 x 450 x 640/1650



AF2.105M Wall-hung

Wall-hung, mounted, combined sluice unit, complete with slop-sink with wall fixing support brackets and wall drain trap connection. Thermal disinfection with built-in steam generator.

► Dimensions 1050 x 450 x 540/1550



AF2.135B Counter-top stand alone

Counter-top floor mounted combined sluice unit, complete with upper work top, slop-sink and plinth and wall or floor drain trap connection. Thermal disinfection with built-in steam generator.

► Dimensions 1350 x 600 x 640/1000



AF2.135L Counter-top stand alone with sink

Counter-top floor mounted combined sluice unit, complete with upper work top with washbasin, slop-sink and plinth and wall or floor drain trap connection. Thermal disinfection with built-in steam generator.

► Dimensions 1350 x 600 x 640/1000



AF2.180B/V Counter-top stand alone with sink and cabinet

Counter-top floor mounted combined sluice unit, complete with slop-sink and plinth, upper work top with basin and cabinet with 1 door and wall or floor drain trap connection. Thermal disinfection with built-in steam generator.

► Dimensions 1800 x 600 x 640/1000



AF2.225L/W Counter-top stand alone with double sink and cabinet

Combined sluice unit with slop-sink, with plinth, upper work top with 2 basin and cabinet with 2 doors and wall or floor drain trap connection. Thermal disinfection with built-in steam generator.

► Dimensions 2250 x 600 x 640/1000

Opening and closing system

Manual version



OPENING



CLOSING



START-UP

Version E: automatic opening with elbow start buttons



OPENING



CLOSING/START-UP

Version A: automatic opening and closing



OPENING




CLOSING/START-UP

Technical features

• standard |  optional

AF2 Professional Line washer disinfecter

TECHNICAL FEATURES	AF2 P-LINE
External Laboratory Certificate for validation of Type Test according to Standards EN ISO 15883-1/3	•
DVGW certified plumbing system, designed to isolate the potable water pipeline system (water-gap) as prescribed by European Standard EN1717	 •
Manufactured in AISI 304 stainless steel brushed Scotch Brite finish	•
Washing tank made of AISI 316 stainless steel (DIN 1.4404) with rounded corners and no welding	•
USB port for connection to a PC and for software upgrades, statistical data on the last 10,000 cycles, technical operation check, disinfection monitoring during the operating cycle	•
Complete with 4 washing programs: Reduced - Normal - Intensive - EXTRA	•
Thermal disinfection with a built-in 3.2 kW steam generator complete with internal temperature control	•
A0 value setting between 60 and 6000. The machine displays the A0 value reached and its calculation so that disinfection conditions according to EN ISO 15883-1/3	•
PT1000 temperature sensor in the washing chamber	•
Descaler liquid dosing pump with reserve warning, leak indicator and machine block in the event there is no more liquid	•
Flow-meter to monitor the correct quantity of liquid used during operation (EN ISO 15883-1 p.5.7.1 - 5.7.2)	•
Dosing pump for liquid detergent with reserve warning, leak indicator and machine block in the event there is no more liquid	+
Printer application on the front panel of the machine	+
The following applications can be included: -Bluetooth application: module for wireless communication between machine and Android devices on which the AT-OS APP AF2 is installed; -USB application for uploading programs directly from a USB flash drive	+

Support and accessories

Supports for bedpans and urinals

AF2 standard supports

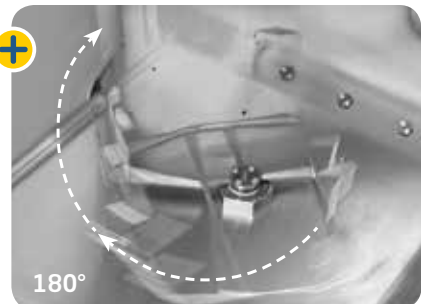
- ▶ Bedpan and urinal
- ▶ Commode and urinal
- ▶ Bedpan with cover and urinal
- ▶ Commode with cover and urinal

The urinals are emptied automatically when the door is closed. It is possible to disinfect up to **4 urinals** per cycle.



AF2 60 PET automatic turning system for slipper bedpans ET Version

The patented AT-OS rotating support allows the operator to position the slipper bedpan with the handle towards the outside. At the start of the program the support will rotate 180°, allowing automatic drainage of organic waste without the help of the operator. Reduction of contamination risk is ensured.



Multiwasher concept

Special supports

Multiwasher basket

This revolutionary AT-OS appliance makes it possible to use the washer disinfector as a multi-purpose piece of equipment to decontaminate general items in hospitals, clinics or homes for the elderly where standards of hygiene must comply with the most exigent principles of disinfection. The Multiwasher basket is suitable for any kind of accessory or container that does not have to be retreated in the sterilisation department. The use of this additional application in the **Professional line** washer disinfector allows:

- ▶ Washing by rotating spray arms (**mechanical action**), disinfection process enhanced by the use of detergent (**chemical action**) and thermal disinfection in less than 15 minutes.
- ▶ Thermal disinfection up to 95°C and A0=6000 (in compliance with EN ISO 15883)
- ▶ Flexible and easy loading to treat a wide variety of devices
- ▶ High disinfection for general medical utensils (not for use in the operating theatre)



Special program for MULTIWASHER function (this application can be installed afterwards)





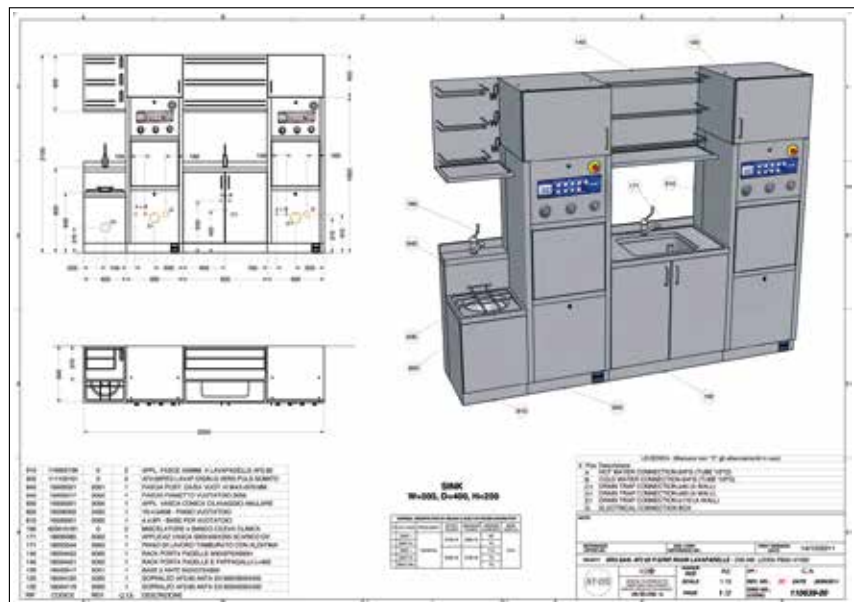
Turn Key Utility Room Projects



The AF2 PROFESSIONAL LINE is adaptable to each room and fulfils any planning requirement. The wide range of models available in this line solves any installation problem for completely furnished sluice rooms or for assisted bathrooms without additional costs and with the advantage of fast installation and assembly both in new structures and, above all, when renovating old structures or replacing old machines. There are different solutions for installing bedpan washers: on the floor, wall-hung or built-in. Moreover, it is possible to install the compact solution which combines slop-sinks, basins and cabinets.

These combined sluice units, adaptable to individual customer requirements, can be delivered with a single water supply and drain system.

AT-OS supports its customers providing technical documentation (installation drawings, customised layouts, plumbing and electrical connection drawings) for turn key utility room projects.



AT-OS drawings and technical documentation for turn key projects.

Slop-sink range

Slop-sink with automated ring washing system and internal tank and pump



EMPTYING



FLUSHING

Different dimensions: **width 45 | 60 cm**

Slop-sink with automated ring washing system connected to the Professional line machine



EMPTYING



FLUSHING

Available dimensions: **width 45 | 60 cm** – Available for models: **AF2-60 | AF2-90**

**RADIUS 15°
FINISHING
AVAILABLE
ON REQUEST**



Sluice room accessories

Stainless steel drip and storage shelves



Wall mounted drip and storage shelf
BEDPANS AND URINALS



Wall mounted drip and storage shelf
URINALS



Wall mounted drip and storage shelf
BEDPANS



WALL MOUNTED STORAGE WITH SHELVES

Storage cabinets and work tops with basins



TOP CABINET IN STAINLESS STEEL

Closed with hinged door to be installed above the washing and disinfecting machine.



WALL CABINET IN STAINLESS STEEL

Stainless steel wall-hung cabinets open or with hinged doors. Internal heating available.



WORK TOP WITH BASIN

Stainless steel work tops with basins in customised dimensions. RADIUS 15 version available to prevent dirt deposits and to ease cleaning.

Other accessories

- ▶ Stand alone cabinetry and cupboards
- ▶ Stainless steel or CORIAN customised work tops
- ▶ Stainless steel covering and panelling
- ▶ Micro-controlled soap dispenser/mixer
- ▶ Manual or automatic photocell water taps

AT-OS also provides water softener and detergent liquids in 5 litre cans, tested and approved in compliance with EN ISO 15883-1/3 to ensure better cleaning and longer equipment life.





CSSD

SLUICE ROOM

SERVICE

OP ROOM

AT-OS
DISINFECTION TECHNOLOGY

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