



AF2 Professional Line

Bedpan Washing Machines



Hospital infections

Hospital infections

Transmission of the infection

- Every year in the USA there are over 2 million hospital infections (Healthcare Associated Infections - HAI) and about 90,000 individuals, one every 6 minutes, die as a result of infections contracted in hospital stay.
- In England 10% of patients hospitalized in wards for acute infections related to hospitalization.
- In Italy, considering its large ageing population, it is remarkable that about a third of deaths are due to infections by antibiotic-resistant bacteria*.

*Source: <https://www.thelancet.com/infection>

5 nov. 2018 *on line*

How infections are spread?





10%

Poor hygiene of
materials and
equipment



10%

By dispersion in air and
environment



80%

through the hands

Dirty-clean route





Bedpan Washing Machines AF2

- Made of 304/316 stainless steel
- EN15883 Part 1/3 A0 certification
- TÜV Süd certification
- DVGW certification with requirements corresponding to EN1717
- CE certification
- Class IIa medical device as EC Directive 93/42
- EN ISO 15883-1 p.5.7.1 - 5.7.2 flow meters
- EN ISO 15883-1 p 5.3.1 self-diagnosis 24H



Solutions to limit the infections



Presence of organic and inorganic waste



Level of microbial contamination



Cleaning level before disinfection



Reliability and repeatability of the chosen method



Exposure time: (A0)



Equipment materials and design



Automatic door opening and closing with optical sensor



Opening the door automatic with pedal



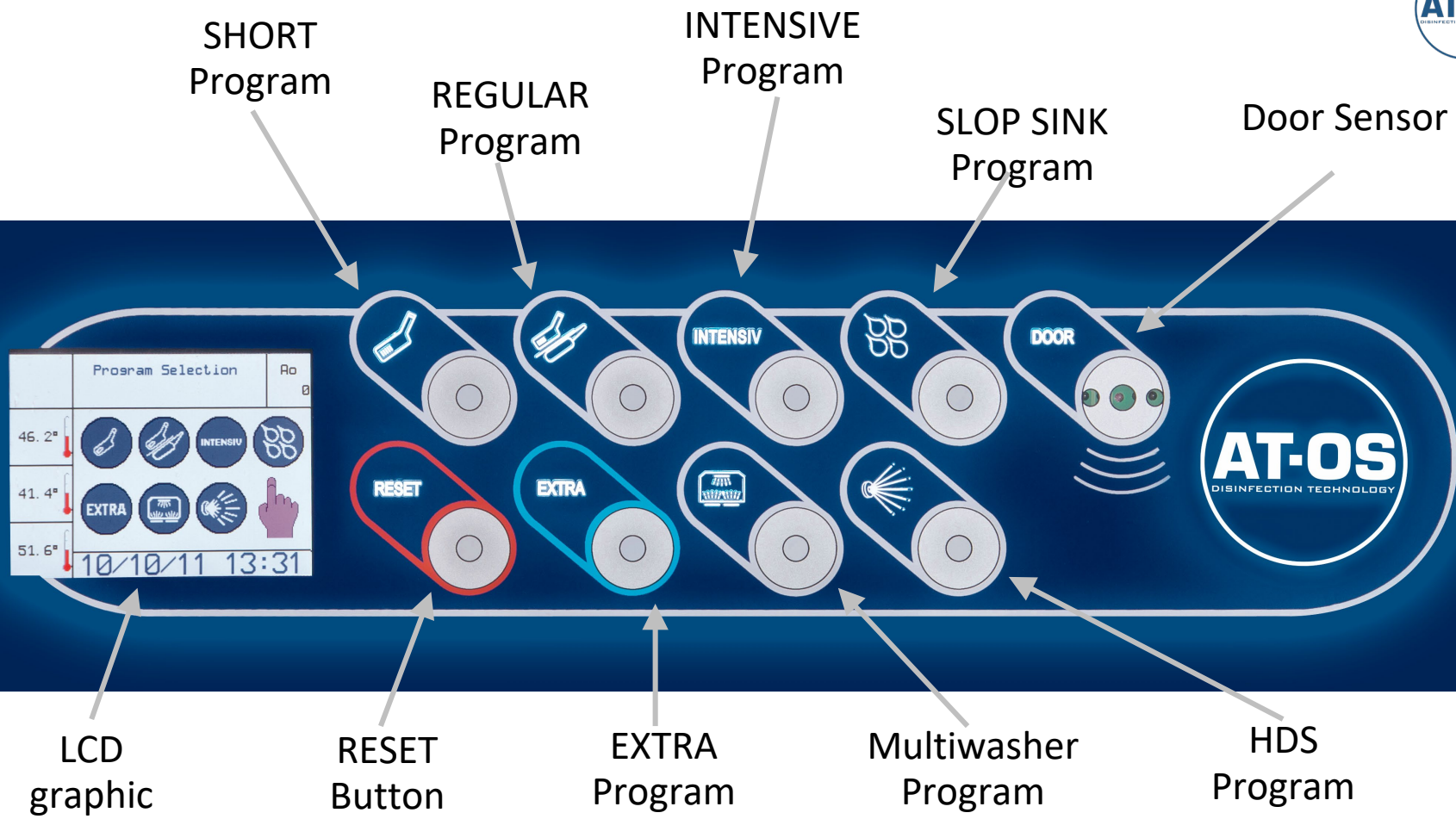
Malpighi Hospital
BOLOGNA



Rome Biomedical
Campus



Programs



SHORT Program

REGULAR Program

INTENSIVE Program

SLOP SINK Program

Door Sensor

LCD graphic

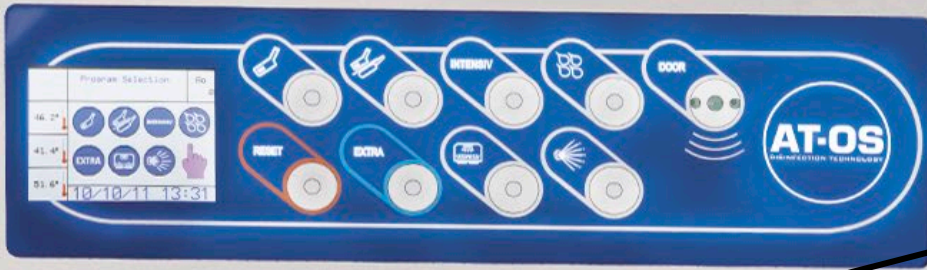
RESET Button

EXTRA Program

Multiwasher Program

HDS Program



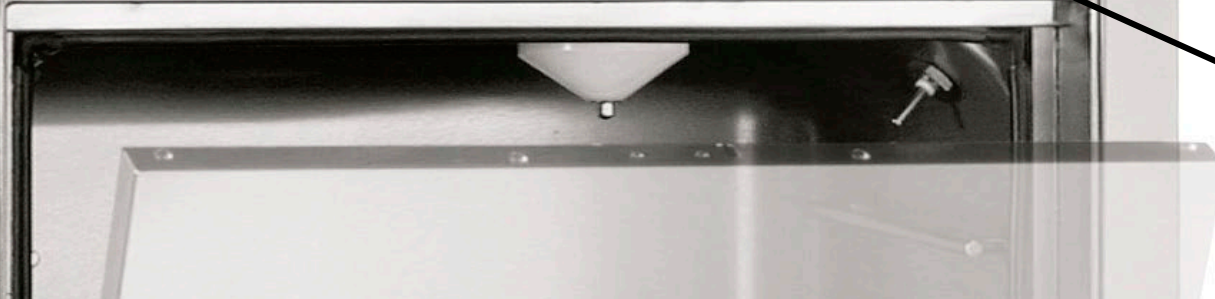


SHORT
Program

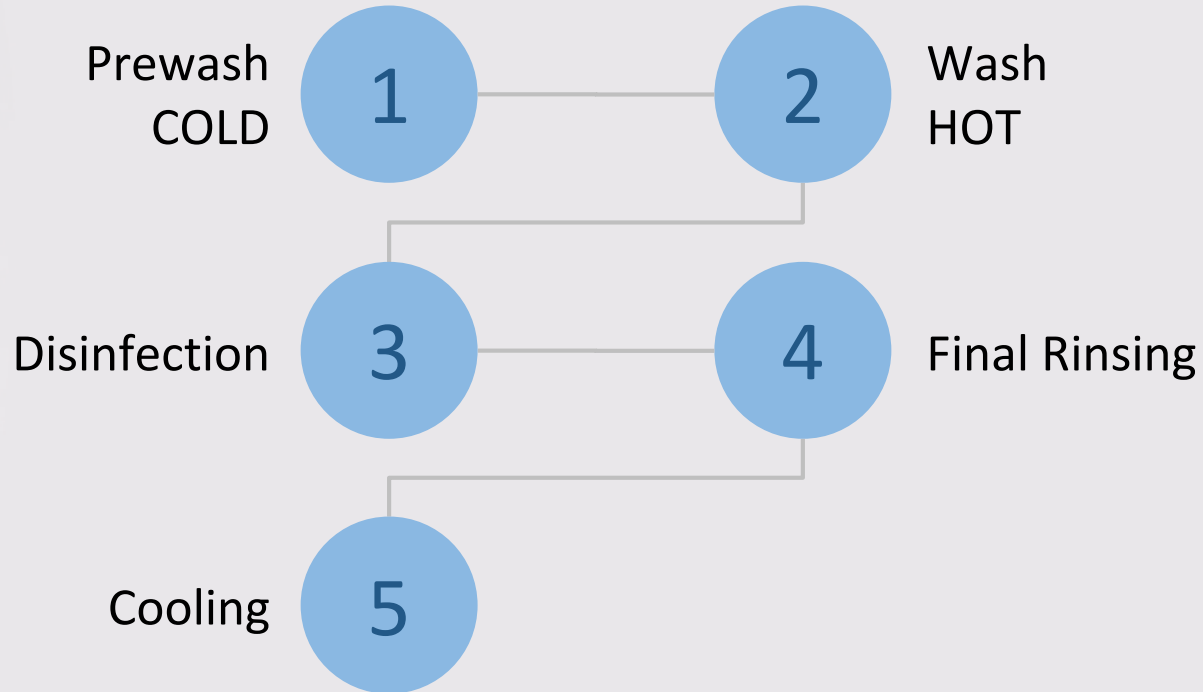


INTENSIVE
Program

REGULAR
Program



Washing programs steps



1. COLD prewash

One or more wash steps with cold water to remove most of the dirt

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2. HOT Wash

One or more wash steps with hot water for cleaning action

1. Prewash COLD

One or more wash steps with cold water to remove most of the dirt



2. Wash HOT

One or more wash steps with hot water for cleaning action



$$A_0 = \sum 10^{[(T-80)/z]} \times \Delta t$$

Holding time	Temperature	A0 value
1'	90 °C	600
5'	90 °C	3000
1'	93 °C	1200
5'	93 °C	6000
10'	93 °C	12000

3. Disinfection

Disinfection with self-produced steam and injected through the wash jets.
During the phase the value A0 is calculated in real time

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4. Final Rinse

Final rinse with disinfected water to remove most of the residual steam

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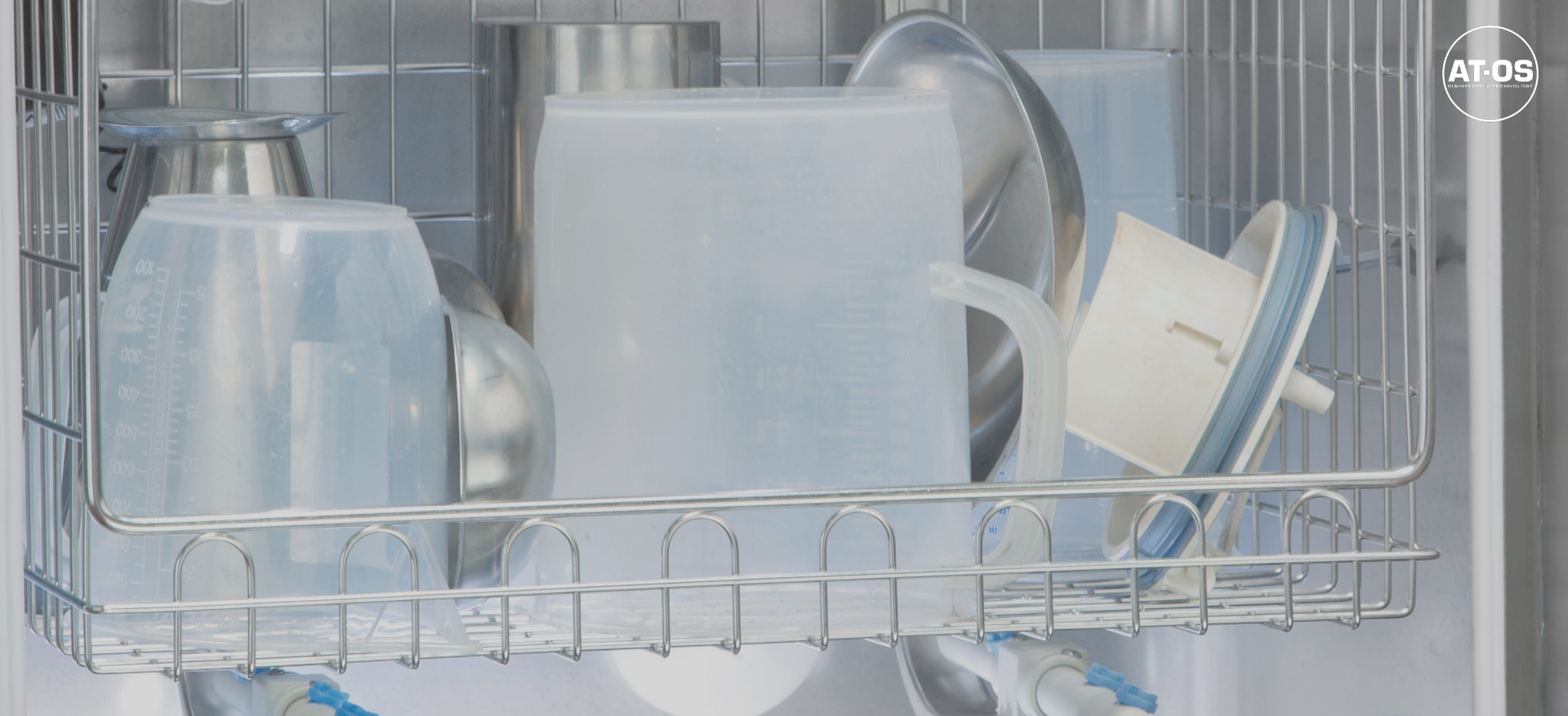


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Disinfection with self-produced steam and injected through the wash jets. During the phase the value A0 is calculated in real time

5. Cooling

Air cooling with ACS system, to cool the washing chamber and partially dry the devices



Features



E.T.S. - Empty 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



D.C.S. (Drain Control System)

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



S.D.S. (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.*

OPTIONAL



D.V.S. (Disinfection Validation System)

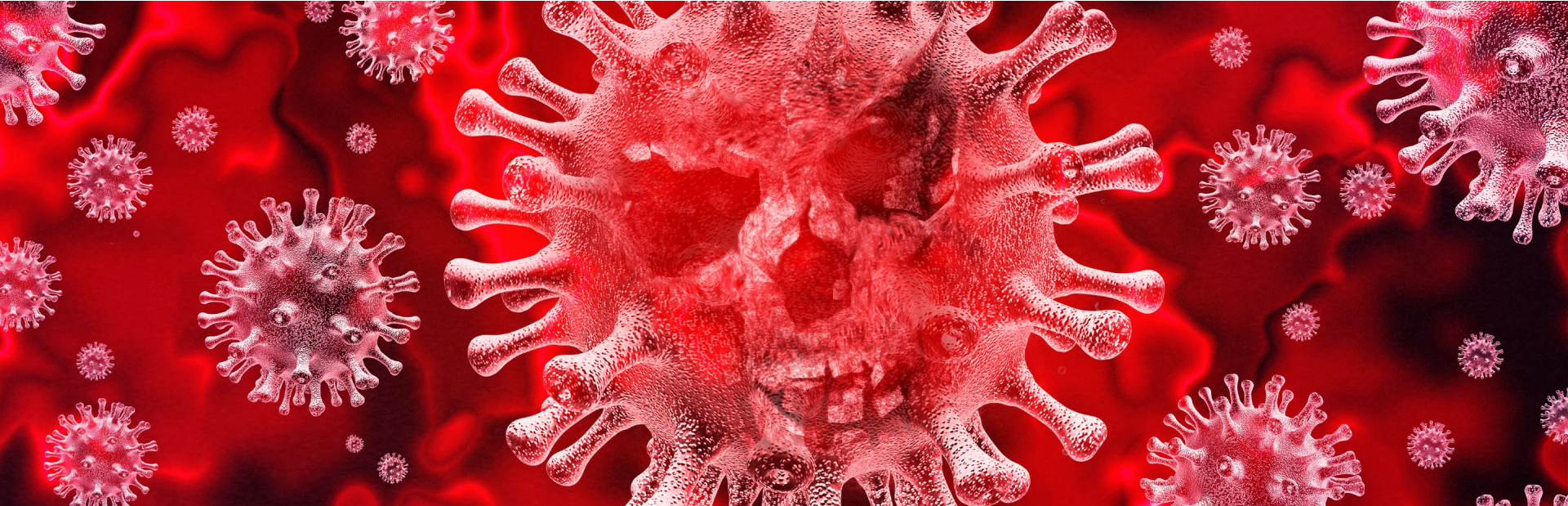
3 PT1000 temperature probes in the washing chamber to ensure accurate disinfection monitoring.

OPTIONAL



Aseptic technology

The new NO TOUCH optical sensor ensures total protection of surfaces and helps to stop the spread of viruses, counteracting the COVID-19. Thanks to the motion sensors the operators' hands will never come into contact with the machine, ensuring the highest standard of hygiene and the total absence of bacteria on the AT-OS machine surfaces.





E.H.M.I. - Easy Human-Machine Interface

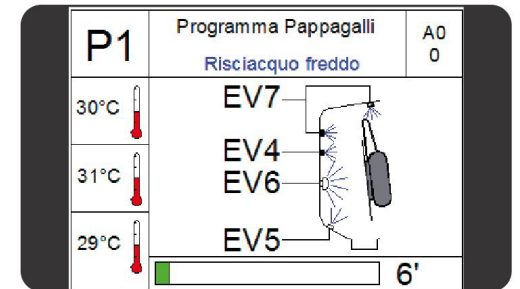
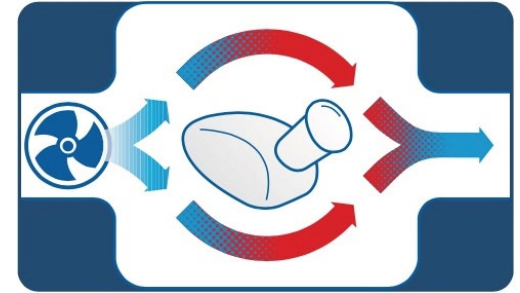
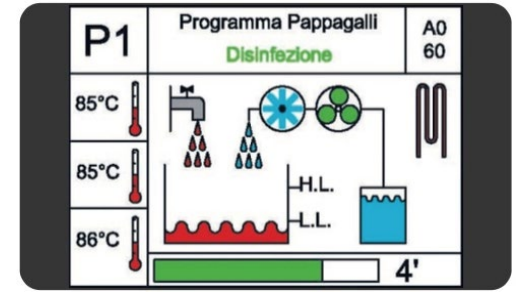
Graphic display for easy communication between machine and user. Top technology display to ensure detailed and clear information during operation and instructions in case of alarm.

OPTIONAL



A.C.S. - 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.



ENC

E.N.C. - Electronic Nozzles Control

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

OPTIONAL



Multiwasher Function

Complete application for washing and disinfecting other utensils and contain.
More details on page11



OPTIONAL



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.





Baskets and supports

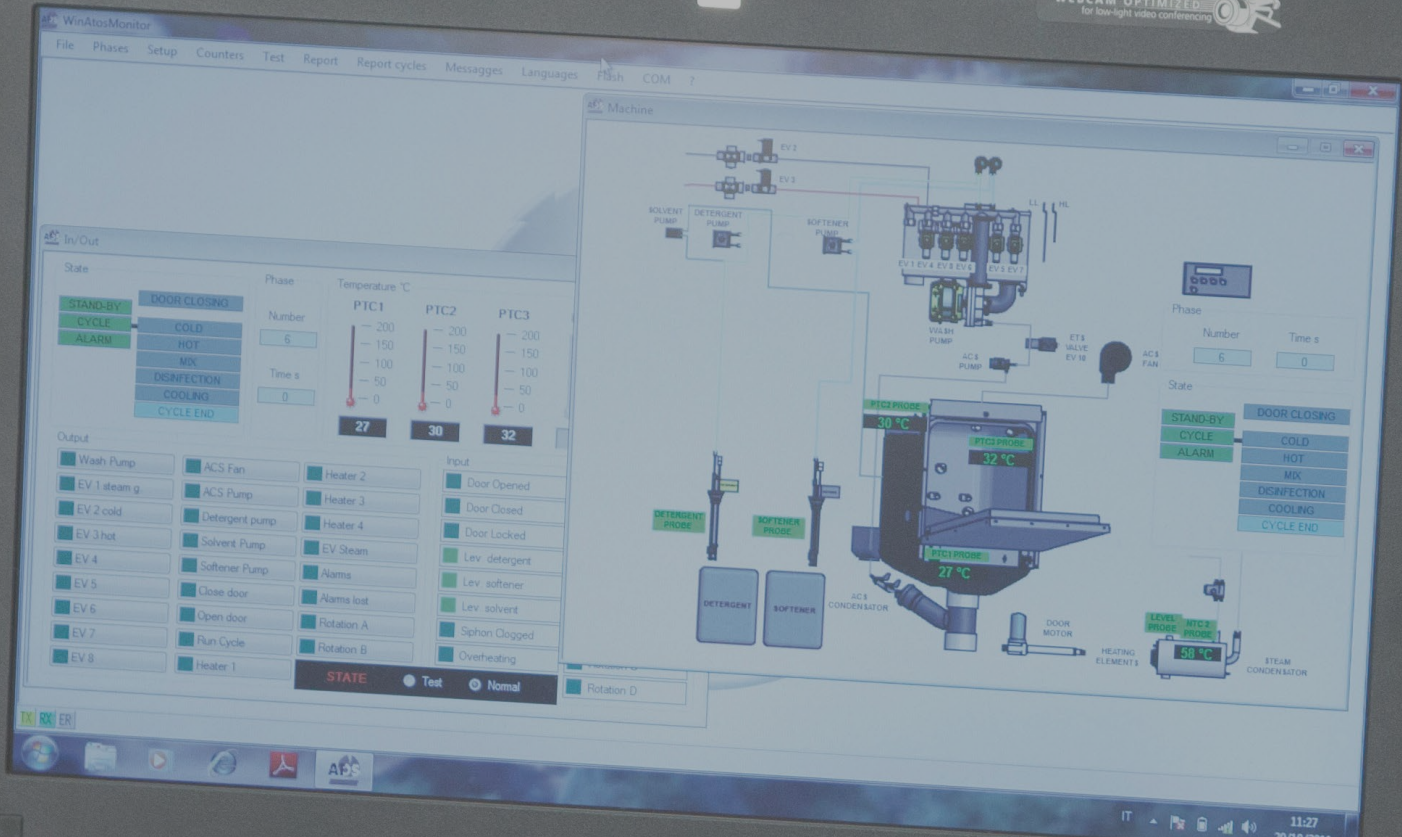
MULTIWASHER Basket

**N.6 Containers
urinals/pitchers per cycle**

Safety and less time for
disinfection management

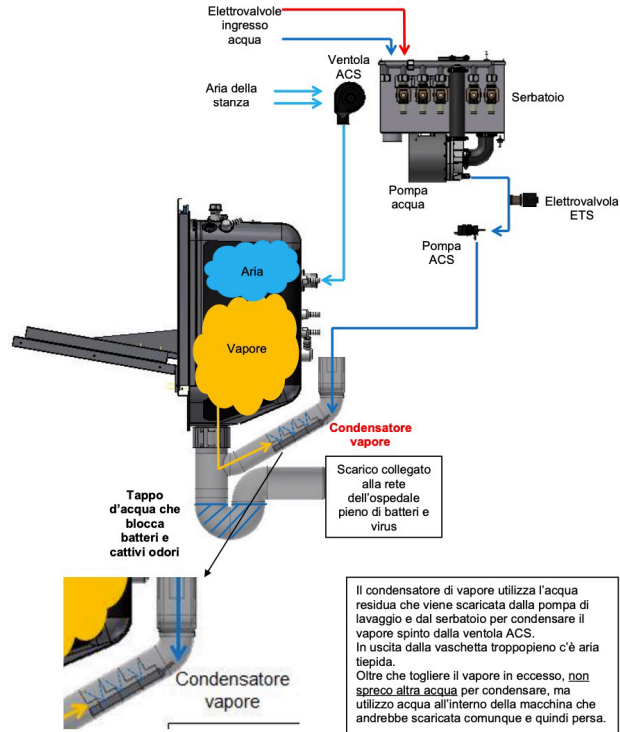
Not available for the version PETG



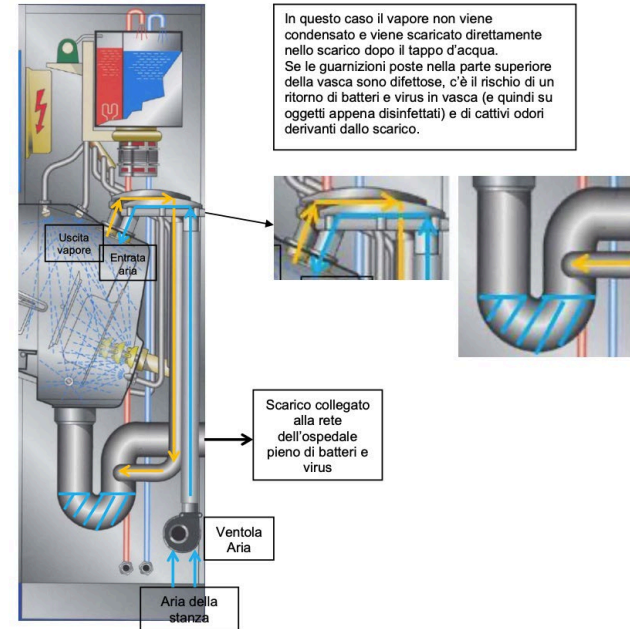


Technical Solutions

Technical solutions to limit infections

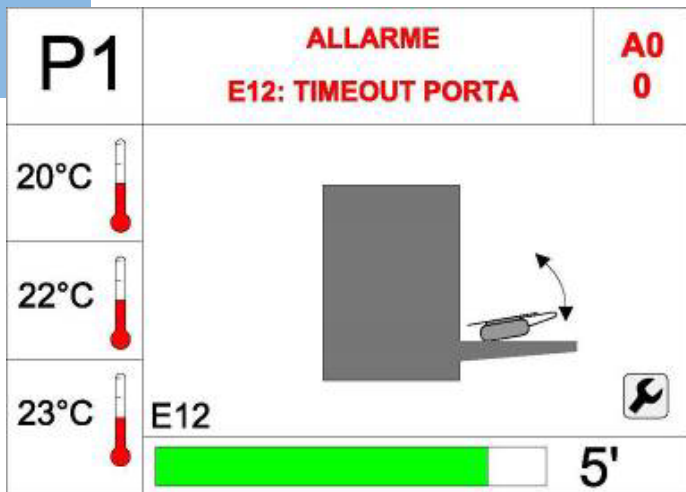


AT-OS Solution



Competitors Solution


Alarm messages



To reset the alarm press the RESET button

Alarm messages block the cycle.
After restoring the alarm you can choose a new program

In case the alarm should recur, contact the service department to request the intervention of a maintenance technician



Voluntary termination of the program

Pressing the red emergency button interrupts all the functions of the machine, whether the machine is doing a cycle or in stand-by.

On the display will appear the alarm E15: MANUAL STOP.

To restore the alarm, turn the emergency button in the direction of the directional arrows until the button unlocks and returns to its natural position.



Interrupt the cycle or machine
ONLY IF REALLY NECESSARY!!
Then remember to restore it.



NO TOUCH Technology



Zero contamination risk

The problems related to the transmission of infections from one patient to another due to the use of devices that are not clean enough is increasingly felt in care environments.

**Hygiene and safety for
patients and operators**



**Disinfection at
highest levels**





Just a movement of the operator's hand is enough to safely start a washing cycle!

If the disinfection treatment is not completed, a safety device keeps the door locked to prevent any contamination to the outside.



No manufacturer can guarantee such a NO TOUCH solution!

NO TOUCH application code


	<p>NTT - No Touch Technology control panel Passing the hand, remotely, in front of the optical sensor, the operator can start the washing cycle. Reset the problem of cross infection.</p>	<p>119903115</p>	<p>780,00</p>
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Image from Price List 2021



Line Brochure



Thanks for the attention