HOSPITAL



AT-OS
DISINFECTION TECHNOLOGY

Your Health, our Technology

DTS - Dynamic Transfer System

Systems and automations for Central Sterile Supply Department (CSSD)

www.at-os.com

DTS *Dynamic Transfer System*

ORGANIZATION AND OPTIMIZATION OF CENTRAL STERILE SUPPLY DEPARTMENT (CSSD)

The innovative DTS-Dynamic Transfer System offers total automation, traceability and optimization of production processes; combined with the quality and excellent performances of the AWD655-15AD washer disinfectors, supporting up to 18 DIN basket, it represents the ideal solution for a total management of a Central Sterile Supply Department (CSSD).

Thanks to its high performances, simple operation and easy maintenance, the DTS system is able to optimize the entire work flow while maintaining a high standard of infection control.

Hygiene, safety, total usability and reliability are the goals achieved by the DTS system, which offers the highest level of technology in the field!

AT-OS solutions meet all the indispensable requirements in Central Sterile Supply Department (CSSD), making the washing process efficient, increasing its productivity, reducing any probability of error, optimizing process times and reducing water and electrical consumptions.

Optimization of workflow

Full automation

Easly management of a CSSD

Energy saving

Full traceability



100% automatic system, no need of staff supervision. All AWD655-15AD trolleys are compatible with DTS.



Intuitive alarm system, easy to restore.



Each trolley is identified through RFID and inserted into the preset machine (optional).



Pause/Start function to stop the shuttle to manually load a trolley into a device for urgent needs or for quick maintenance operations.

The automatic DTS system is made with configurable modules to adapt to any type of Central Sterile Supply Department (CSSD)

Balanced distribution of washer disinfectors workload.

Predictability and total certainty of maintenance costs.

The DTS system can be placed in narrow areas that are not normally accessible for loading operations using manual trolleys.

Easy cleaning and maintenance of the area below the DTS system.



6 Pass-through window

The automatic pass-through system allows the return of the washing trolleys from the clean area, where the trolleys are emptied from the treated instruments, to the dirty area, where the trolleys are filled again, for the next cycle of disinfection in the washer disinfectors.

3 Shuttle in the dirty area

The shuttle carries and loads the trolley with the dirty instruments into the washer.

2 Automatic loading module

The automatic loading module transports the trolley onto the transport shuttle.

1 Loading trolley

The operator, using the loading trolley, pushes the trolley with the dirty tools onto the auto load module.

THE OPERATION OF THE DTS SYSTEM

The DTS system consists of a loading module in the dirty area which, through an automatic system of rollers, loads the trolley with the dirty instruments onto the shuttle. The shuttle, moving horizontally along the front of the washing machines, automatically loads the trolley into the first available machine. The customized washing program for the specific trolley starts automatically. Once the washing program has been correctly carried out, another shuttle is activated in the clean area which unloads the trolley with the clean instruments from the washing machine and transfers them to an unloading module. *The trolley is ready for the next phases.*

Managing the available space

The modularity of the automatic loading/unloading system allows the DTS system to be adapted to any type of department configuration. Modules can be configured to hold up to 3 washing trolleys on both loading and unloading areas to speed up and simplify large workflows in large Central Sterile Supply Department (CSSD).



4 Washing program

The machine automatically starts the specific washing program for the loaded trolley.

Shuttle in the clean area 5

The shuttle unloads and transports the clean trolley to the automatic unloading module.

The washer machines are equipped with the *automatic washing trolley recognition* technology: no need for the operator to select the washing cycle.

The automatic DTS system has been manufactured in compliance with Standards:

LVD 2014/35/EU
EN 60204-1
EN 61439-1 (CEI:17-113)
EN 61439-2 (CEI: 17-114)
EN 13849-1
EMC 2014/30/EU

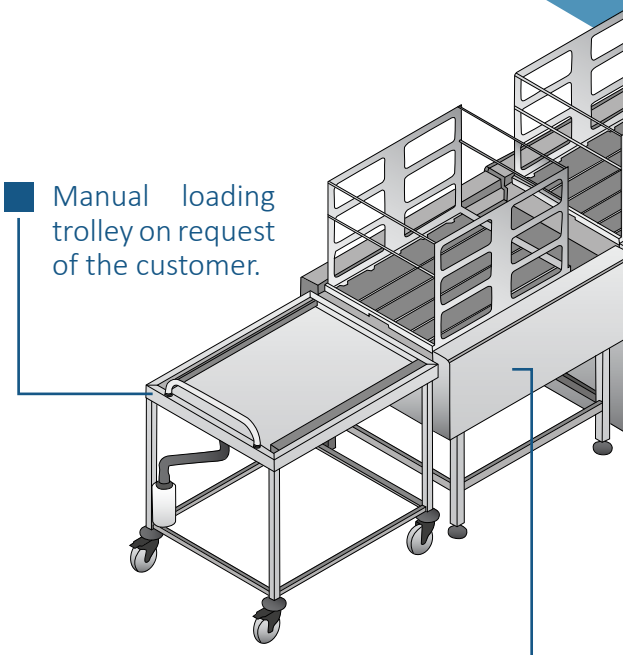
EFFECTIVE SOLUTIONS FOR EACH CONFIGURATION

CUSTOMIZABLE DESIGN ACCORDING TO CUSTOMER NEEDS

The modular solutions suggested by AT-OS allow to provide a complete and customized offer for a new or restructured project of Central Sterile Supply Department (CSSD). For each project AT-OS can provide to its customers different solutions, to be able to satisfy the specific needs in the best way.

In the design phase, the width of the room is an essential element in order to establish the number of washer disinfectors needed: the objective is to meet the required production capacity, from the lowest to the highest, to allow the customer to reduce investment space, exploit unused space and thus lower costs.

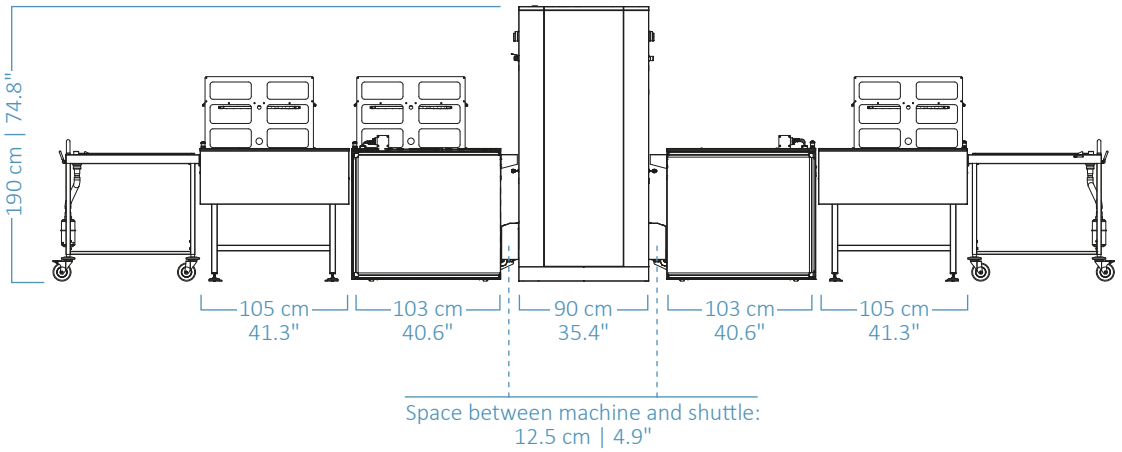
The solution can be equipped with *Pause/Start function*: the automation can be stopped and restarted at any time by touch a button, without losing time, because it is not necessary to approve or reset an error message. This function allow the user to load a trolley manually or perform maintenance immediately on unoccupied machines. When restarted, the automation will resume from where it was interrupted to load the next free machine.

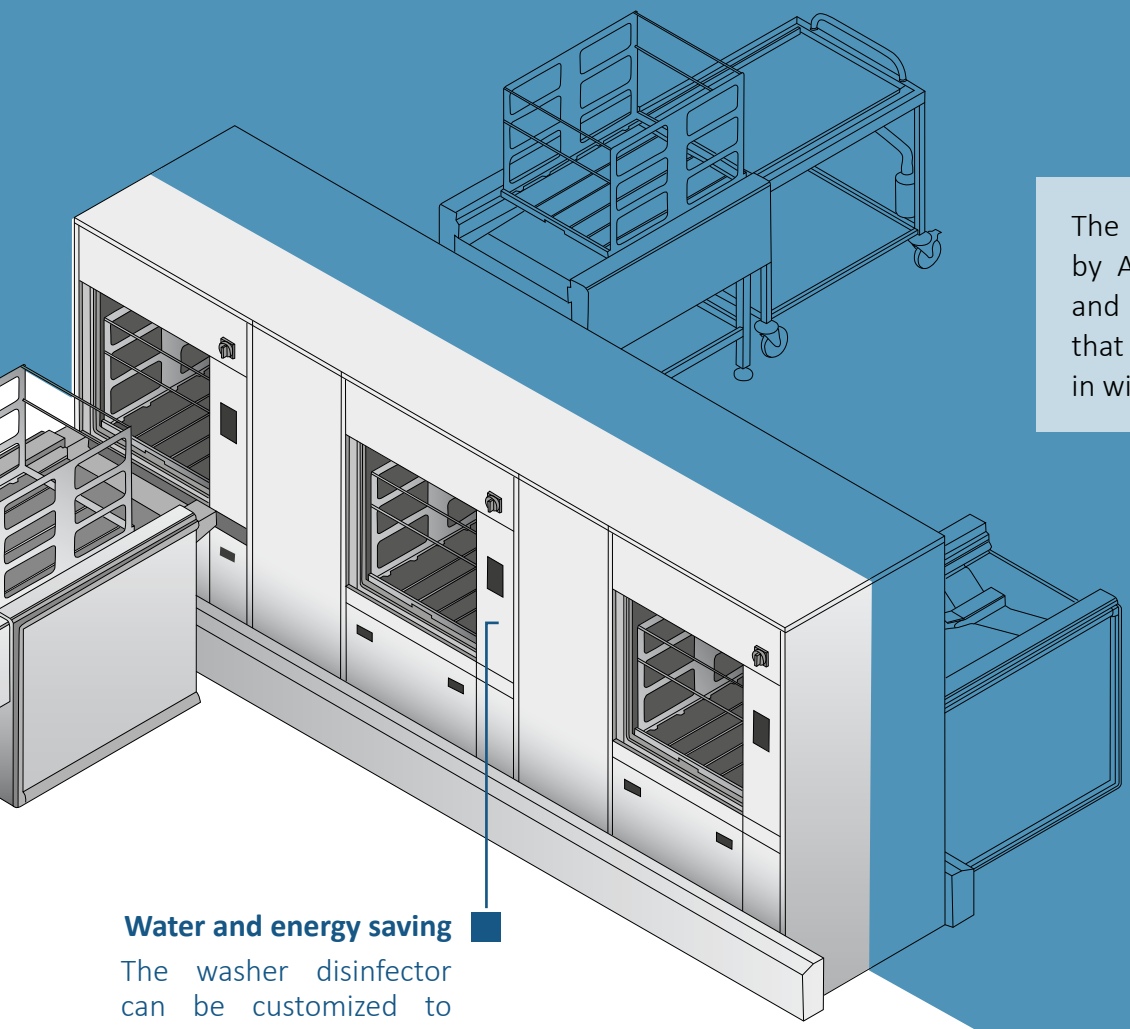


Technical features

An optimal configuration of the DTS suggested by AT-OS includes: three 18 DIN baskets AWD655-15AD washer disinfectors; one automatic loading module with one position and one automatic unloading module with one position; one loading shuttle and one unloading shuttle.

Power supply	230V 1N~ 50HZ
Weight of the electrical cabinet	250 Kg
Weight of the single shuttle	180 Kg
Weight of the single automatic loading (or unloading) module with 1 position	90 kg



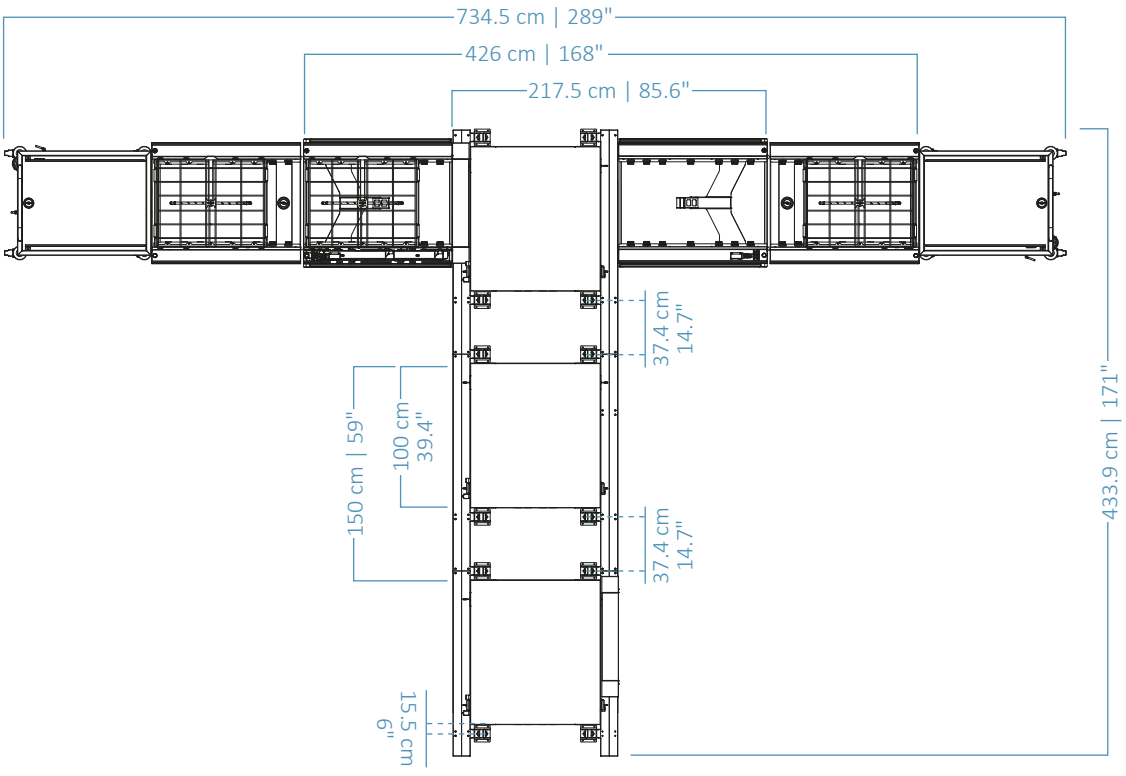


The technology designed by AT-OS is able to adapt and exploit even spaces that are particularly limited in width or depth.

Water and energy saving

The washer disinfector can be customized to have up to 2 boilers for demineralized and hot water and one tank for cold water in order to reduce loading time and save water.

CLEAN AREA
DIRTY AREA



MONITORING, TRACEABILITY AND WORK CYCLE MANAGEMENT

EBOX SYSTEM

In a Central Sterile Supply Department (CSSD) it is essential to monitor and trace the washing cycles and all their information. The Ebox traceability system allows you to remotely monitor the running washing cycles on the washer disinfectors, manage and archive all the information from the devices on the hospital server, create graphics on cycles, alarms, consumption, and allows you to keep a file for legal documentation.

Tracking of each connected device

Thanks to the Ebox computerized documentation system, all the automatic devices that process the instruments are connected. For each connected device it is possible to monitor its parameters and record the cycle documentation data.

Real-time monitoring

Through the web-based software, the operator can connect via browser and check the status of the machine at any time (Ebox is connected to the network via Ethernet RJ45).

Search and print of specific cycles

Thanks to the advanced search function, the operator can select a specific time period and scroll through the list of all the cycles performed. The operator can export the information relating to the desired cycle and print the graphic representation.

AVAILABLE ON REQUEST

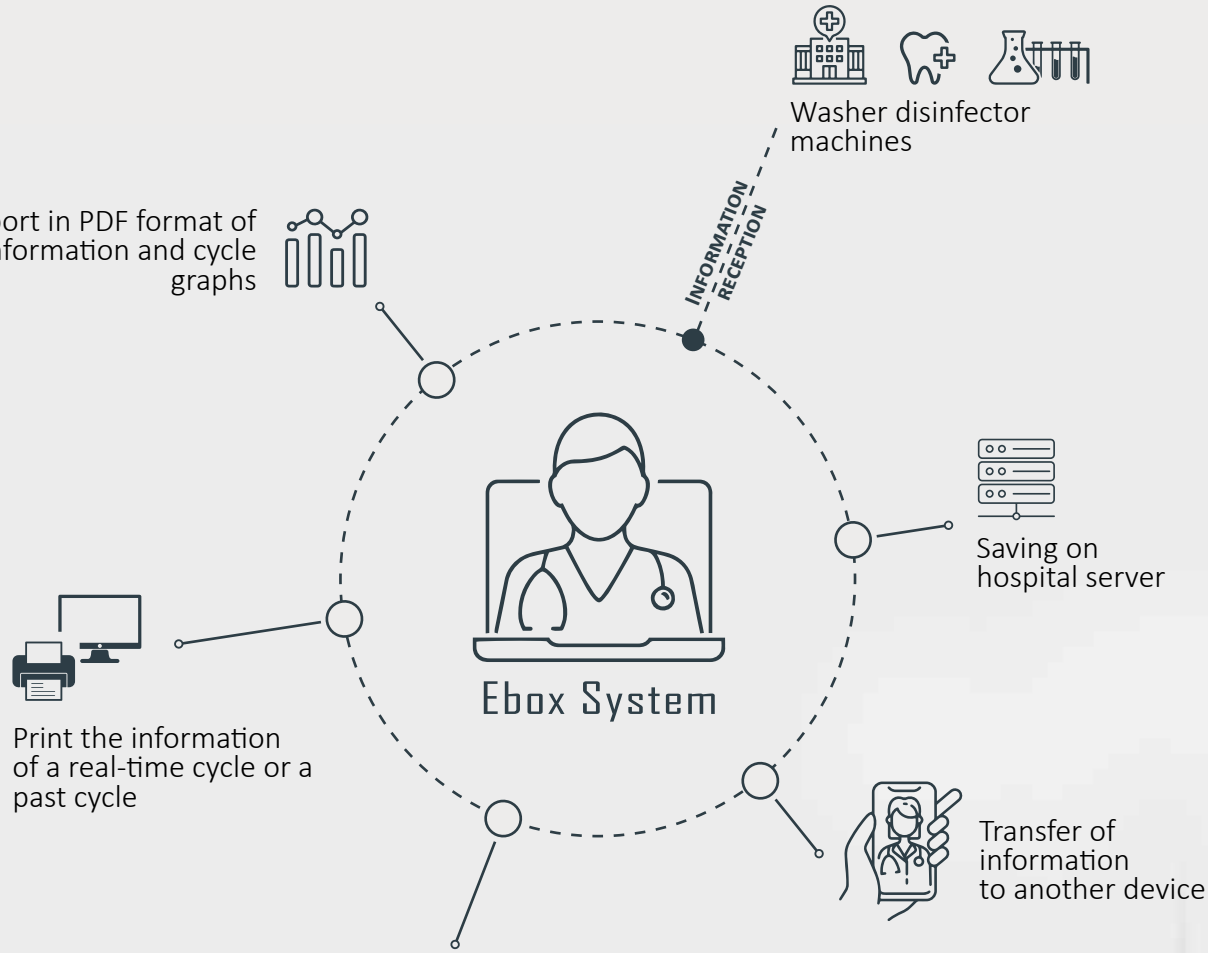


SMART CONTROL SYSTEM

On request, the DTS system can be connected to a tablet for user-friendly and customized management. The tablet allows the operator to modulate and configure the DTS system according to different needs.

- Smart and user-friendly.
- Remote control of single machines or the entire DTS system.
- Management of manual operations or maintenance on a single machine.

Contact us for more information!



For each wash cycle, it records the following data:

- Cycle phases
- Cycle type
- Cycle temperatures
- Cycle start and end date/time



Washing trolleys, accessories, baskets and inserts

The DTS system is completed with a wide range of washing trolleys up to 6 levels and with removable levels, accessories, baskets and inserts designed to meet different washing needs:

- Da Vinci instruments
- surgical and microsurgical instruments
- instruments for anesthesia, ophthalmology and endoscopy
- containers, trays and drawers
- sanitary clogs
- baby bottles and teats



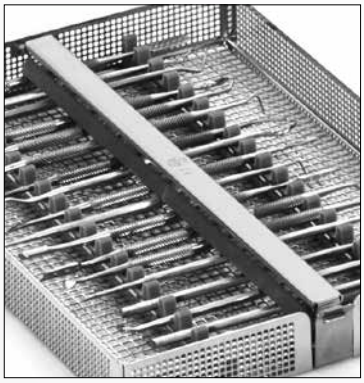


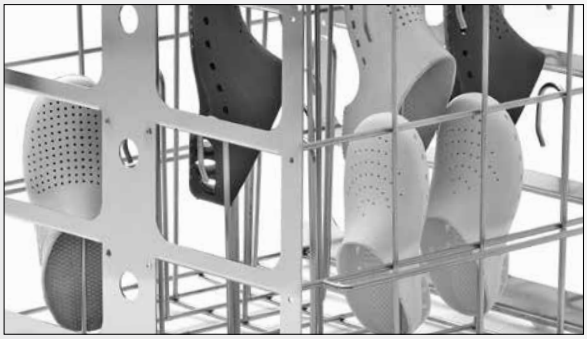


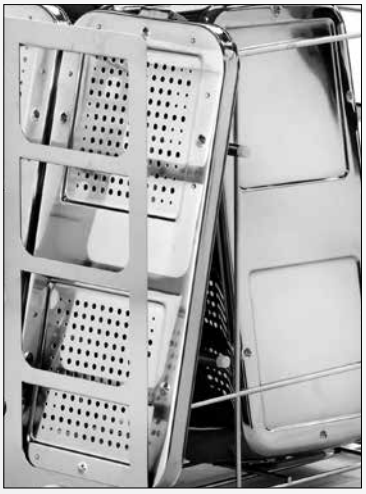












Notes

HOSPITAL DENTAL LABORATORY DRYING AND STORAGE CABINETS

CSSD RETIREMENT HOMES STAINLESS STEEL FORNITURE

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