cisa
We care about life

WASHER-DISINFECTORS

For surgical instruments and healthcare applications

Healthcare

Cisa Group

Cisa Group is a global supplier of infection control systems with production plants in Italy and Brazil.

Founded in 1947, Cisa Group, together with Cisa America and Cisa Brasile, forms an international group that is one of the world's leading manufacturers of washing, disinfection and sterilization technology for infection control for the healthcare and life sciences industries.

HEALTHCARE INDUSTRY

LIFE SCIENCES INDUSTRY

Creating safer environments in hospitals, healthcare facilities and laboratory applications is a fundamental priority for the well-being of humans worldwide.
This is the commitment that drives Cisa to its claim:

We care about life

DIRECTIVES
93/42/ EC
2007/47/EC
2006/42/EC
2014/30/UE
2014/35/UE
PED 2014/68/UE

PRODUCT STANDARDS
EN 61010-1
EN 61010-2-040
EN 60204-1
EN 61326-1
EN 13445
EN 285
EN ISO 15883-1,-2,-6

QUALITY SYSTEM
UNI EN ISO 9001
UNI CEI EN ISO 13485

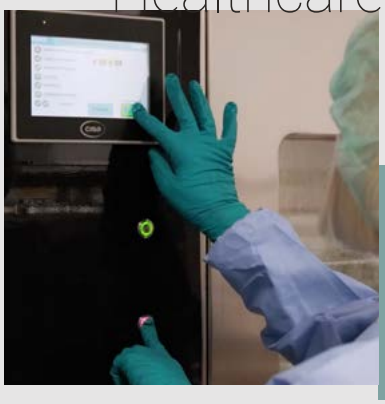
Cisa Group is part of Faper Group, leading Italian supplier of world-class, innovative engineering solutions.
The Group is inspired by its founder, Fabio Perini, and has based its success on the ability to combine invention and simplicity.
Faper Group was established in 2001 as a holding company dedicated to innovation in the fields of tissue paper converting, healthcare and real estate management.

FAPER GROUP

MORE INFO ON THE FAPER GROUP WEBSITE

Technology

Healthcare



Cisa Group develops advanced infection control technologies for the safeguard of healthcare workers and the health of patients.

- Complete central sterilizing service departments for hospitals (CSSD)
- Sterilization for healthcare applications and clinics of all sizes
- Disinfection and washing technologies for different operational requirements

Life Science

Cisa Group is the technology partner for scientists, researchers and engineers who develop life-enhancing products every day.

- Washing and sterilization technologies for laboratories and research centres
- Sterilization for pharmaceutical production

Waste

Cisa Group, with 15 years of experience in the treatment of infectious waste, provides ground breaking solutions safe, economical and carbon friendly. Cisa Group is leading the field with the invention of its Waste Sterilization Department (WSD®).

- WSD. Complete waste treatment department
- WSM. Plug and Play Sterili-Station

Software

Over the years it has developed unique proprietary IT and energy saving systems.

- Tracecare® .Traceability of the sterilization process for the reconditioning of surgical kits in CSSDs
- TraceWaste. Traceability of the sterilization process for the treatment of infectious waste using Cisa WSD Waste sterilization departments

Hospital washer disinfectors

A wide range of hospital (and CSSD) washer/disinfectors for disinfecting surgical instruments, anesthesia and respiratory products, hospital tools, glassware, containers, operating shoes, and other devices that require high-level disinfection.

- The machines are designed with a user friendly interface for the operators and in full compliance with environmental requirements and a quiet operating environment.
- Installation and maintenance are possible by means of smooth and clear procedures. (Effortless installation, with ease of positioning and connection to the main utilities.)

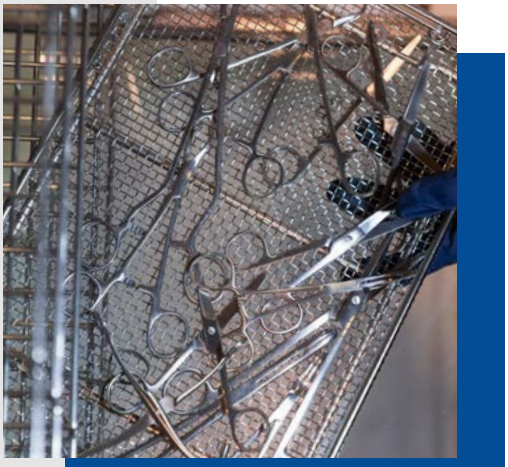
Range of washers

Based on their applications, Cisa washer/disinfectors are classified in series.

P-M. Medium Washer/Disinfectors Model: P-M 104 SV

Cisa washer disinfectors are used for reprocessing CSSD medical devices, including:

- Surgical instruments, using ST specific surgical instruments rack. The rack is provided with rotating nozzles between each level from the top and the bottom: capacity 8 to 12 DIN trays
- Anesthesia and respiratory products using specific AN rack/kit (fast coupling in a modular configuration) with connections for the entire patient circuit including hoses, breathing bags, masks, etc.
- Containers and hospital tools like kidney dishes, basins, and similar using specific CO rack.
- Tubular instruments, rigid endoscope devices and micro-instruments using specific MIC rack.
- Operating shoes using specific ZO rack.



P-KF. Large Washer/Disinfectors Models: P-KF 155 & P-KF 305

Cisa washer disinfectors are used for reprocessing CSSD medical devices including:

- Surgical instruments, using proper surgical instrument rack (ST). The rack is provided with rotating nozzles between each level from the top and the bottom; capacity 9 to 18 DIN trays (P-KF 155) and 18-36 (P-KF 305)
- Anaesthesia and respiratory products, using AN rack/kit (fast coupling in a modular configuration) with connections for the entire patient circuit including hoses, breathing bags, masks, etc.
- Containers and hospital tools such as containers, kidney dishes, basins, etc. using the CO rack.
- Tubular instruments, rigid endoscope devices, and micro-instruments using the MIC rack.
- Operating shoes using the ZO rack.
-

The trolleys are modular and fully configurable to meet the above requirements, with the optimization of the load configurations and therefore of the total number of the same.

- ***P-M 104***
- ***P-KF 155***
  P-KF 155 Slim
- ***P-KF 305***

Why use a Cisa washer disinfector

There is a wide range of applications for its washer/disinfectors using thermal or chemical disinfection with the aim of reducing infection risks.

- Provide safety for patients and staff by controlling and preventing contact with contaminated devices.
- Reprocess medical devices that require high level disinfection.
- Reduce the number of microorganisms present on the devices.
- Remove blood, saliva, tissues and all residues that become barriers during the sterilisation process.
- Reduce the microbiological load before the packaging and sterilisation process.
- Improve the safety of staff who are working in the clean area, packaging or preparing the load.
- Cisa thermodisinfectors guarantee low water consumption.

Within the CSSD

The Central Sterilizing Service Department (Central Supply, or Sterile Supply as it is also known), comprises that service within the hospital in which medical/surgical supplies and equipment, both sterile and nonsterile, are cleaned, prepared, processed, stored, and issued for patient care.

CISA's instrument washer and disinfector is installed, following CSSD regulations, inside the dirty area (as shown in the caption), with pass-through access to the clean area.

DIRTY AREA

CLEAN AREA

STERILE AREA

Features

Washing chamber

The washing chamber is made entirely from AISI 316L stainless steel. The chamber is curved to ensure good drainage and to make cleaning easier. The internal chamber surfaces have a “BA” type finish, and are subject to electrolytic polishing to obtain a surface with a roughness of less than 0.3 microns, and with a high resistance to corrosive attack. The heaters for keeping water at the selected temperature are placed in the chamber’s bottom, protected double stage by a metal filter. Another protective metal filter, placed at the bottom level of the chamber, protects the reservoir from any items that may fall and block the passage of the water.
The upper part of the chamber is designed to allow any condensate to drop straight into the reservoir below. The wash chamber has a lamp placed over the top of the chamber, and is hermetically enclosed by glass.

Circulation Water Pump

The capacity of the water pump defines the quality of operation of any washer disinfector. The circulation water pump adopted in the P-KF series has a high flow rate capacity:

- 450 - 550 l/min for models P-KF 155, P-M 104 while
- 1400 - 1500 l/min in total for the larger model P-KF 305 with double chamber there are three water pumps for a total of

Pre-Heating of The Water (Fast System)

In order to reduce the processing time, P-KF 155 and P-KF 305 models are provided of FAST system. Water loading time can be considerably reduced and water can be pre-heated for thermal disinfection and for the last rinse before its introduction into the washing chamber, by means of stainless steel tanks of suitable capacity. This allow to drastically reduce passive times, resulting in a reduction of the total cycle time of about 40% as compared to generic washer-disinfectors of the same size. This feature is available also on P-M104 as an option.

Maintenance

The external cabinet enables access for maintenance thanks to the careful layout of the components, which makes maintenance very easy. All of the main components can be serviced from the front.

Dosage Pumps & Chemicals

Dosing pumps are used for adding chemicals during the cycle. The dosing pumps can be preconfigured for different chemicals within an open system that uses any validated chemical.
4 dosing pumps are included in the P-KF model, while in the P-M104 model there are 2, upgradable to 3.
The chemical tanks can be stored inside the washer, or can be connected from a central storage system. Each tank is provided with a level sensor for detection of the remaining chemical which activates an alarm when the container is empty or there is not enough chemical left to run the selected cycle.

Control System

The unit is entirely controlled by an electronic programmable logic device (PLC) that covers cycle performances, control of parameters, and verification of process safety. The control system incorporates high levels of safety features for both operator and the machine.

Control Panel

The human interface is based on a modern industrial grade component designed with a smooth surface for hygiene and easy cleaning.
The control panel is provided with standard 7” HMI touch screen upgradable to 10”, built-in 2” dot matrix printer, emergency button, door control buttons, and is mounted at an ergonomic level position to enable good view and easy control.

Printer

On the front panel there is a built-in impact printer for cycle documentation which includes: print out of date and time with hospital name, lot number, operator name, selected cycle, parameter values in different cycle phases that can be programmed as per customer requirements phase by phase display, total cycle time and cycle results (valid or invalid) as well as printing alarms during cycle execution. Printer can be mounted on the unloading side on request.

User Interface

On the Touch Screen control and display there are different pages for different purposes:

- Main menu
- Cycle library
- Cycle parameter display
- Data relating to the operation of the machine (operator code, batch, etc.)
- General preparation and information of the machine to start a cycle
- Process control
- Programmed preventive maintenance
- Instructions for maintenance and troubleshooting
- Alarm indication and alarms history
- Date and time verification
- Display of physical values (temperature and A0)
- Machine information (condition of door(s), temperature, etc.)
- Operator access level control with configurable level of accessibility
- Pages for set point cycle follow up
- Calibration and technical pages (password protected)
- Programming new cycles or modifying standard cycle (password protected)
- Type of heating selection
- Manual advanced steps

The touch screen language can be pre selected to meet different clients satisfaction.

Operators Access Level Control

Cisa system allow every operator to have its own identity code by using the predefined password and access level to which it belongs. The levels can be customized for each operator with access to multiple functions. Operator name will be printed and kept in the system for external storage or transferred to external supervision/traceability system software.

Alarms

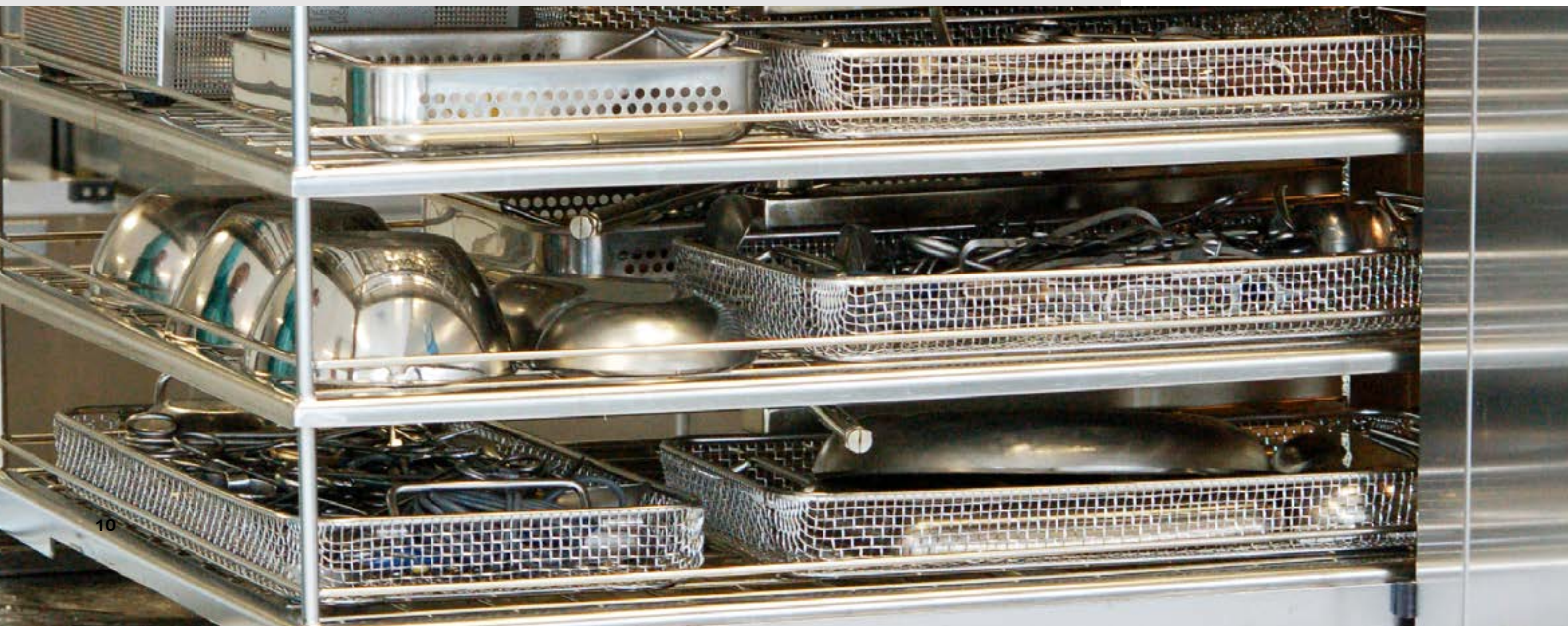
Audio and visual alarms are defined for operator warning; the alarms list includes audio and visual alarms; the alarms list includes multilevel alarms with clear message notifications; alarm levels are configured, according to the level of importance, to stop the machine or the cycle, or to issue a warning notification without affecting the running cycle.
The alarm lists are complete for safe and perfect operation for the operators and the machines. The alarms history can display all the alarms that occurred in the last 90 days. Alarms are also indicated on unloading side in case of double doors execution. The end of cycle alert is included for alerting the user of the finished cycle and unloading process.

Service & Maintenance Program

The touch screen is equipped with software pages for periodic preventive maintenance, enabling a safe operation of the machine, and a self-maintenance program for steam generator discharge with user acceptance; There are technical pages for calibration and parameter control. Easy and friendly troubleshooting pages are added for easy maintenance and service.

Remote Maintenance

The machine, through the Touch Screen, is equipped with a remote access system that allows to be connected to the Cisa customer service by means of a simple Ethernet connection with internet access. This represents the fastest way for a Cisa technician to verify a problem and reduce the downtime.



Washing & disinfection cycle

Pre programmed cycles for:

- Washing cycle at 91°C for 05 minutes (P1 NV Surgical Instruments)
- Washing cycle at 91°C for 05 minutes (P2 Micro-instruments)
- Washing cycle at 91°C for 10 minutes (P3 BGA Short)
- Washing cycle at 91°C for 05 minutes (P4 SV)
- Washing cycle at 60°C for 05 minutes (P5 Anesthesia)
- Washing cycle at 91°C for 01 minutes (P9 Shoes)
- Washing cycle at 91°C for 01 minutes (P13 Containers)
- Drying cycle at 110°C for 20 minutes (P14 Drying)
- Self-disinfection cycle at 91°C for 05 minutes (P15 Self)
- Open cycles (from 01 up to 08 pre-set as P1 cycles)

Quality & safety

Cisa Washer-disinfectors are built in accordance with standard directives. Cisa P-M and P-KF are medical devices class IIB, in conformity to UNI ENI ISO 15883-1,2.

Accessories

System for automatic washer disinfector loading/unloading

The system automatizes equipment loading/unloading operations allowing the washer disinfector to be loaded or unloaded automatically.
Each individual system consists of a device placed in front of machine, detecting sensors and coupling devices for trolley transfer manual bypass mode and safety devices.

Loading Rack

The internal washing racks have special connectors for easy and smooth internal locking when inside the chamber.
Both series have the possibility to wash and disinfect different types of material according to the needs and demands of the hospital.

Optional

Automatic Trolley Recognition

This system enables to recognize the trolley type as well as its presence inside the washing chamber, inhibiting cycle start when absent. Moreover, the instrument washer can automatically start the cycle depending on the trolley type detected. This feature allows for maximum performance when combined with the automatic device loading and unloading option, which enables a fully automatized loading process, thus leaving the users with the sole task of positioning the rack to be washed on the trolley in front of the automatic loading device. In this case, the equipment will collect the rack from the trolley, insert it inside the equipment's chamber, automatically start the cycle unload once finished.

External Steam Connections

External steam connection sets are available as an extra optional and are customizable to on-site requirements in order the machine can be connected to the hospital steam supply (V) and (EV).

Centralized Dosage System

To avoid multiple tanks for chemical storage, a centralized supply system can be provided as an optional. The system includes special outer storage tanks connected to the pumps and the piping system.

Condenser

During the draining phase a condenser can be installed to dehumidify the air after the exhaust from the chamber. A closed circulation cooling device condenses the vapour from the washing chamber, allowing discharge of the condensate directly from the washer into the main drain.

UPS Backup Control System

The UPS backup system is connected to the PLC and the touch-screen and allows to bring the cycle to completion in case of sudden surges or power failure. The cycle remains valid as long as the conditions that ensure the cycle performances have not been compromised.

Drain Cooling Device

All discharges are conveyed to a thermostat-controlled pipe in order to detect the temperature before the exhaust in the pipeline. The device measures the discharge temperature and adds service water to cool it down if necessary. The drain will be maintained at less than 60°C and it is adjustable for better management of the service water consumption.

Washing Arms Obstruction Detection System

This system checks if the washing arms of the internal rack rotate properly during the washing cycle, by means of a set of proximity magnetic sensors, according the different levels/configuration of the rack(s).

LED Light

This option allows for the operators of the machine to recognize the status of the machine even when the operators are far from the machine.

The light are LED with different colors. The LED light is applicable either to a single door and double door machine.

LED LIGHT

White: machine ready to be loaded

Blue: machine is running a cycle

Green: the cycle is ended regularly

Red: the cycle is stopped or ended irregularly due to alarms

The range

All measures are expressed in mm. (W x H x D)

CISA P-M - P-KF SERIES MEDICAL DEVICE CLASS IIB 93/42/EC

Series	Models	Chamber Dimensions	Dimensions 1P and 2P	Chamber Volume Lt	Load Capacity: US Din Tray
P-M	104 SV	550x660x620	780x2000x800 (x830)	225	12
P-KF	155	680x630x840	1200x2000x1036 (x1066)	400	18
	155 Slim	680x630x840	883x2450x1036 (x1066)	400	18
	305	680x630x1680	1200x2000x1910 (2P)	800	36

KEEP IN TOUCH

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Azienda con sistema di gestione qualità certificato

Revision 05 September 2023