



“PLASMA - LOW TEMPERATURE STERILIZER”

Hospital & Laboratory Application



Infection Control System



Infection Control System



“THE CISA GROUP COMPANY”

COMPANY PROFILE

CISA has been manufacturing and selling sterilization systems for over 60 years for both hospitals and industrial applications for all sterilization needs.

CISA is an Industrial Group which manufactures hospital and industrial machinery having integrated technological production systems with factories in different continents and its headquarters in Lucca, Italy.

Distributor coordination and technical service centres are managed through CISA branches, located in Joinville (Brazil) for Brazil and Latin America, in Amman (Jordan) for Middle East area, and Singapore for Asia,

as well as distributors and sales offices worldwide to ensure a constant presence and complete service in all countries in which CISA operates.

CISA takes part in a very important field, **sterilization**, that is in continuous development. For this reason it has focused its activity on a line of products that includes: infection control solutions, machinery for washing and disinfecting, machinery for high and low temperature sterilization, software systems for management control and medical waste treatments. All the products in the different lines are “made in CISA” from design to manufacture.

Gabriele Pacini
CEO

Cisa - Infection Control System

“WITHIN THE CSSD”

WHERE YOU CAN FIND ME

The Sterile Processing 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.

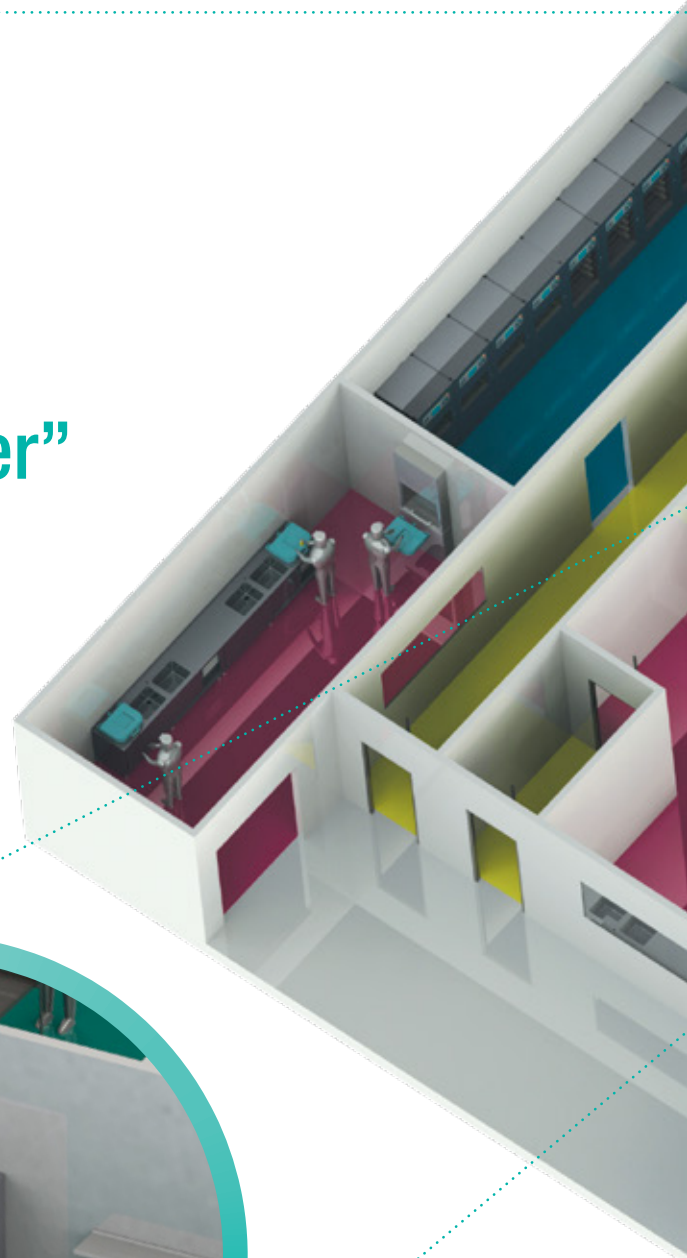
The Plasma Low Temperature Sterilizer CISA (as shown on the legend) according the regulations of the CSSD is installed in the clean area with pass through access of the sterile area.

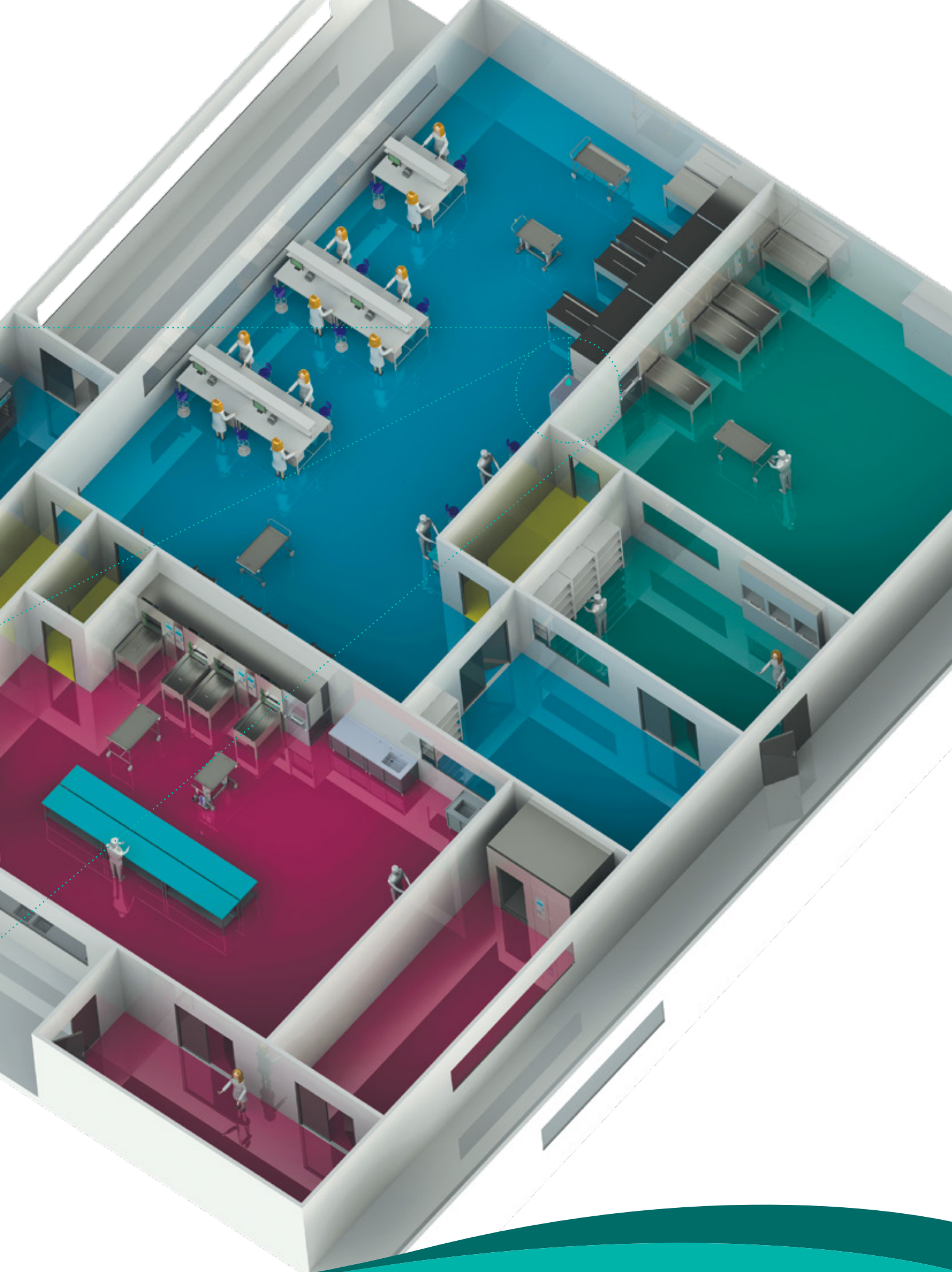
“Plasma Low Temperature Sterilizer”

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Legend:

- DIRTY AREA
- CLEAN AREA
- STERILE AREA





“MODEL P-420 SPS EASY”

HOW IT WORKS



The plasma machine operates based on sterilisation with hydrogen peroxide. Peroxide has a high oxidising effect, when it enters into the sterilisation chamber in vacuum conditions and in the presence of an electromagnetic field, it reforms into free radicals, spreading over the instrument surfaces. These active radicals kill bacteria and micro-organisms, even at low temperatures. It is therefore effective on temperature sensitive materials or in any case on instruments which are not resistant to high temperatures. The degree of vacuum reached by the machine also allows removing any remaining peroxide residuals at the end of the sterilisation, which would otherwise remain on the instruments.

ADVANTAGES OF THE PLASMA METHOD

The Plasma series offers optimal sterilisation results for a wide range of medical devices.

- Low temperature sterilisation (45-50 °C)
- Improved penetration and efficiency
- Improved heat distribution
- No toxic residue
- Full and safe sterilisation
- Lower operating costs
- Lower maintenance costs
- Designed to be easily moved (on wheels)
- High sterilisation flexibility
- Colour touch screen to monitor parameters
- Integrated incubator for microbiological tests
- Multi shot hydrogen peroxide cartridges



PLASMA TECHNOLOGY

This technology is based on sterilisation by hydrogen peroxide and is suitable for all those temperature sensitive products which cannot withstand high temperatures of steam.



“APPLICATIONS”

LOW HUMIDITY RATE

CISA SPS EASY can sterilise metal and non-metal instruments such as stainless steel, aluminium, bronze, titanium, glass, various type of plastic and resins, woven and non-woven fabrics.

The only precaution to be observed must be that the objects inserted inside the chamber should have a low humidity rate, i.e. be perfectly dry.

“INTEGRATED MICROBIOLOGICAL INCUBATOR”

INTEGRATED TESTER

The destruction of micro-organisms is the result of the oxidising action of peroxide. The Plasma steriliser is a conventional release machine, therefore it is necessary to validate each sterilisation with a microbiological indicator. For this reason, the machine has an integrated microbiological tester which allows certifying the reduction of the bacterial load and the achievement of sterility.

“CYCLES & PROCESSES”

HYDROGEN PEROXIDE INJECTION

The materials to be sterilised are packaged and placed on the shelf in the chamber. Once loaded, the first phase consists of the vacuum generation, during which the plasma is activated; this generates a movement of ions within an electromagnetic field. Thanks to this first process, the chamber reaches an optimum temperature of about 45 degrees, which allows facilitating the action of the hydrogen peroxide.

According to the type of material, such hydrogen peroxide injection process inside the chamber can occur once (flat materials) or twice (hollow bodies).

At the end of the sterilisation process, thanks to the high vacuum pump, it is possible to perform vacuum/air washes in order to completely clean the objects from any peroxide residue





“CONTROL PANEL”

CONTROL SYSTEM

The CISA SPS EASY apparatus adopts a control system via a colour LCD touch screen display.

The built-in biological incubator enables the operator to position the microbiological sample directly on site, without having to use any additional equipment. The printer allows you to reproduce on paper the parameters and the outcome of the sterilisation process.



“CHAMBER”

GOOD HEAT CONDUCTIVITY

The Plasma model is equipped with a sterilisation chamber made entirely of aluminium, with good heat conductivity.

The rectangular design of the sterilisation chamber ensures a high load ratio, in respect of the overall dimensions of the machine. The machine is available in 100, 150 or 200 litre versions, with one or two doors.



“CONTAINERS”

ACCESSORIES

A wide range of optimally designed accessories is available in order to load the instruments inside the machine easily.





“CARTRIDGE” 12 HYDROGEN CAPSULES

The CISA SPS EASY series uses cartridges containing 12 hydrogen capsules each. Each capsule contains 2 ml of 58% hydrogen peroxide. According to the type of material loaded inside the chamber, each cartridge will always ensure a number of sterilisation cycles ranging between 6 and 12.

“QUALITY & SAFETY” OUR CERTIFICATES

The Plasma SPS Easy meets the requirements of 93/42 / EEC, after 2007/47 / EC and the requirements of EN ISO 14937: 2009. Complies with the directives 2004/108 / EC (EMC) and 2006/95 / EC (LVD). It also complies with the product standards CE EN 61010-1:2013, IEC 61010-2040: 2005, IEC 60204-1: 2010, EN 61326-1: 2013 and IEC 60601-1-2: 2001.



“BENCH TOP P-290 SPS 1P”

• Equipment Type	Class II A
• Door	Single door
• Total Volume	50L
• Available Volume	33L
• Power Supply	110V or 220V 50Hz Single Phase
• Work Type	Short time loading, constant running
• Sterilizing time	Short cycle: 17 mins Standard cycle: 33 mins
• Power	≤ 1500VA
• Constant Temperature Power	700W
• Standby Power	Approx. 25W
• Runtime Environment Temperature	5°C ~ 40°C
• Runtime Environment Humidity	30% ~ 95%
• Incubator Temperature	56°C (adjustable according to category of spore)
• Environment Pressure	700hPa ~ 1060hPa
• Installation Method	Bench top installation (optional supporting frame)
• H ₂ O ₂ Dosage	Short cycle: 2ml/cycle Standard cycle: 4ml/cycle
• Loads for Each Cassette	Short cycle: 12times Standard cycle: 6times
• Chamber Working Temperature	35°C ~ 55°C
• Minimum Vacuum Degree	50Pa
• Chamber Shape	Rectangular
• Dimension	700x970x750
• Package Dimension	840x1100x850
• Minimum Installation Space	1000x1000x1500
• Chamber Dimension	260x220x660
• Instrument Tray Dimension	625x193
• Instrument Tray Numbers	2 layers
• Load Capacity	10 Kg, 5Kg/layer
• Net Weight	215Kg
• Gross Weight	270Kg
• Chamber Material	Aluminum
• Shell Material	ABS + Q235
• Scheduled Maintenance	Half a Year
• Screen	7 inch, TFT true color, touch screen
• Printer	Heat sensitive micro printer or Needle Printer
• Records	Save and inquiry at any time

“P-4270 SPS EASY 1P/2P”

• Device Type	Class II A
• Door	Single door
• Total Volume	124L
• Usable Volume	100L
• Power Supply	3 ~ (380±38)V, (50±1) Hz 3 ~ (220±22)V, (50±1) Hz Standard three-phase five-wire system
• Duty Type	Short time loading, continuous duty
• Sterilization Time	Short cycle: 31mins Standard cycle: 55mins
• Input Power	≤ 3600VA
• Constant Temperature Power	1100 W
• Standby Power	Approx. 25W
• Runtime Environment Temperature	5°C ~ 40°C
• Runtime Environment Humidity	30% ~ 95%
• Incubator Temperature	56°C (adjustable according to category of spore)
• Environment Pressure	700hPa ~ 1060hPa
• Installation Method	Landing installation with caster
• H ₂ O ₂ Dosage	Short cycle: 2ml/cycle Standard cycle: 4ml/cycle
• Loads for Each Cassette	Short cycle: 12times Standard cycle: 6 times
• Chamber Working Temperature	35°C ~ 55°C (non-condensing)
• Minimum Vacuum Degree	50Pa
• Chamber Shape	Rectangular
• Dimension	800x1002x1730
• Package Dimension	950x1150x1880
• Minimum Installation Space	1400x1400x2000
• Chamber Dimension	450x400x690
• Instrument Tray Dimension	360x650
• Instrument Tray Numbers	2 layers
• Load Capacity	20Kg, 10Kg/layer
• Net Weight	490Kg
• Gross Weight	590Kg
• Chamber Material	Aluminum
• Shell Material	ABS + Q235
• Scheduled Maintenance	Half a year
• Screen	7 inch, TFT true color, touch screen
• Printer	Heat sensitive micro printer or Needle Printer
• Records	Save and inquiry at any time

“P-4270 SPS EASY 1P/2P”

• Device Type	Class II A
• Door	Double door
• Total Volume	124L
• Usable Volume	100L
• Power Supply	3 ~ (380±38)V, (50±1) Hz 3 ~ (220±22)V, (50±1) Hz Standard three-phase five-wire system
• Duty Type	Short time loading, continuous duty
• Sterilization Time	Short cycle: 31mins Standard cycle: 55mins
• Input Power	≤ 3600VA
• Constant Temperature Power	1100 W
• Standby Power	Approx. 25W
• Runtime Environment Temperature	5°C ~ 40°C
• Runtime Environment Humidity	30%~95%
• Incubator Temperature	56°C (adjustable according to category of spore)
• Environment Pressure	700hPa ~ 1060hPa
• Installation Method	Landing installation with caster
• H ₂ O ₂ Dosage	Short cycle: 2ml/cycle Standard cycle:: 4ml/cycle
• Loads for Each Cassette	Short cycle: 12 times Standard cycle:: 6 times
• Chamber Working Temperature	35°C ~ 55°C (non-condensing)
• Minimum Vacuum Degree	50Pa
• Chamber Shape	Rectangular
• Dimension	800x1100x1730
• Package Dimension	950x1150x1880
• Minimum Installation Space	1400x1400x2000
• Chamber Dimension	450x400x690
• Instrument Tray Dimension	360x650
• Instrument Tray Numbers	2 layers
• Load Capacity	20Kg, 10Kg/layer
• Net Weight	600Kg
• Gross Weight	660Kg
• Chamber Material	Aluminum
• Shell Materia	ABS + Q235
• Scheduled Maintenance	Half a year
• Screen	7 inch, TFT true color, touch screen
• Printer	Heat sensitive micro printer or Needle Printer
• Records	Save and inquiry at any time

“P-4210 SPS EASY 1P/2P”

• Device Type	Class IIA
• Door	Single door
• Total Volume	187L
• Usable Volume	150L
• Power Supply	3 ~ (380±38)V, (50±1) Hz 3 ~ (220±22)V, (50±1) Hz Standard three-phase five-wire system
• Duty Type	Short time loading, continuous duty
• Sterilization Time	Short cycle: 25mins Standard cycle: 35mins
• Input Power	≤ 4200VA
• Constant Temperature Power	1800 VA
• Standby Power	Approx. 160 VA
• Runtime Environment Temperature	5°C ~ 40°C
• Runtime Environment Humidity	30% ~ 95%
• Incubator Temperature	56°C (adjustable according to category of spore)
• Environment Pressure	700hPa ~ 1060hPa
• Installation Method	Landing installation with caster
• H ₂ O ₂ Dosage	Short cycle: 3ml/cycle Standard cycle: 6ml/cycle
• Loads for Each Cassette	Short cycle: 12times Standard cycle: 6 times
• Chamber Working Temperature	50 ~ 5°C (non-condensing)
• Minimum Vacuum Degree	80Pa
• Chamber Shape	Rectangular
• Dimension	860x1050x1790
• Package Dimension	1160x1290x1950
• Minimum Installation Space	2000x2000x2200
• Chamber Dimension	450x520x800
• Instrument Tray Dimension	430x760
• Instrument Tray Numbers	Two Shelves/Four layers
• Load Capacity	80Kg, 20Kg/layer
• Net Weight	500 Kg
• Gross Weight	600 Kg
• Chamber Material	Aluminum
• Shell Material	ABS + Q235
• Scheduled Maintenance	Half a year or 1000 working hours
• Screen	7 inch TFT true color, touch screen
• Printer	Stylus and Micro-printer
• Records	Save and inquiry at any time

“P-4210 SPS EASY 1P/2P”

• Device Type	Class IIA
• Door	Double door
• Total Volume	187L
• Usable Volume	150L
• Power Supply	3 ~ (380±38)V, (50±1) Hz 3 ~ (220±22)V, (50±1) Hz Standard three-phase five-wire system
• Duty Type	Short time loading, continuous duty
• Sterilization Time	Short cycle: 25mins Standard cycle: 35mins
• Input Power	≤ 4200VA
• Constant Temperature Power	1800 VA
• Standby Power	Approx. 160 VA
• Runtime Environment Temperature	5°C ~ 40°C
• Runtime Environment Humidity	30% ~ 95%
• Incubator Temperature	56°C (adjustable according to category of spore)
• Environment Pressure	700hPa ~ 1060hPa
• Installation Method	Landing installation with caster
• H ₂ O ₂ Dosage	Short cycle: 3ml/cycle Standard cycle: 6ml/cycle
• Loads for Each Cassette	Short cycle: 12times Standard cycle: 6 times
• Chamber Working Temperature	50 ~ 5°C (non-condensing)
• Minimum Vacuum Degree	80Pa
• Chamber Shape	Rectangular
• Dimension	860x1110x1790
• Package Dimension	1160x1290x1950
• Minimum Installation Space	2000x2000x2200
• Chamber Dimension	450x520x800
• Instrument Tray Dimension	430x760
• Instrument Tray Numbers	Two Shelves/Four layers
• Load Capacity	80Kg, 20Kg/layer
• Net Weight	550 Kg
• Gross Weight	650 Kg
• Chamber Material	Aluminum
• Shell Material	ABS + Q235
• Scheduled Maintenance	Half a year or 1000 working hours
• Screen	10 inch + 7 inch TFT true color, touch screen
• Printer	Micro-printer or needle printer
• Records	Save and inquiry at any time

“P-6464 SPS EASY 1P/2P”

• Device Type	Class IIA
• Door	Double door
• Total Volume	245L
• Usable Volume	200L
• Power Supply	3 ~ (380±38)V, (50±1) Hz 3 t (220±22)V, (50±1) Hz Standard three-phase five-wire system
• Duty Type	Short time loading, continuous duty
• Sterilization Time	Short cycle: 45mins Standard cycle: 65mins
• Input Power	≤ 4500VA
• Constant Temperature Power	2200 VA
• Standby Power	Approx. 160 VA
• Runtime Environment Temperature	5°C ~ 40°C
• Runtime Environment Humidity	30% ~ 95%
• Incubator Temperature	56°C (adjustable according to category of spore)
• Environment Pressure	700hPa ~ 1060hPa
• Installation Method	Landing installation with caster
• H ₂ O ₂ Dosage	Short cycle: 4ml/cycle Standard cycle: 8ml/cycle
• Loads for Each Cassette	Short cycle: 6 times Standard cycle: 3 times
• Chamber Working Temperature	35°C ~ 55°C (non-condensing)
• Minimum Vacuum Degree	50Pa
• Chamber Shape	Rectangular
• Dimension	1000x1100x1790
• Package Dimension	1160x1260x1950
• Minimum Installation Space	2000x2000x2200
• Chamber Dimension	680x450x800
• Instrument Tray Dimension	615x760
• Instrument Tray Numbers	2 layers
• Load Capacity	20Kg, 10Kg/layer
• Net Weight	685Kg
• Gross Weight	760Kg
• Chamber Material	Aluminum
• Shell Material	ABS + Q235
• Scheduled Maintenance	Half a year
• Screen	10inch + 7 inch, TFT true color, touch screen
• Printer	Heat sensitive micro printer or Needle Printer
• Records	Save and inquiry at any time

“MODELS”

OUR PRODUCT RANGE

All of the sizes and measurements below can be changed according to the different configurations and applications of the machines.

	CHAMBER DIM	DIMENSIONS 1P-2P	LT	GROSS WEIGHT	
P-290 SPS	260x220x660	700x970x750	50	270Kg	
	450x400x690	800x1002x1730	124	590Kg	P-4270 SPS EASY
P-4270 SPS EASY	450x400x690	800x1100x1730	124	600Kg	
	450x520x800	860x1050x1790	187	600Kg	P-4210 SPS EASY
P-4210 SPS EASY	450x520x800	860x1110x1790	187	650 Kg	
	680x450x800	1000x1100x1790	245	760Kg	P-6464 SPS EASY





Infection Control System

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