



STEAM CLEANING AND DISINFECTING

○ INTRODUCTION

○ CLEANING AND DISINFECTING

○ PRINCIPLES

○ BENEFITS

○ VALIDATIONS

○ CERTIFICATIONS

○ EQUIPMENT

○ APPLICATIONS



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SANIVAP equipment and biocleaning protocols contribute very efficiently to the fight against nosocomial infections in healthcare settings (hospitals, clinics, retirement homes...)

Steam biocleaning ensure simultaneous cleaning and disinfecting of patient environment surfaces (floors, wall, toilets, furniture...) as well as surfaces of many medical devices (operating tables, lights, incubators, beds, mattresses...)

SANIVAP biocleaning method fulfil totally the requirements of the European standards in terms of disinfection.



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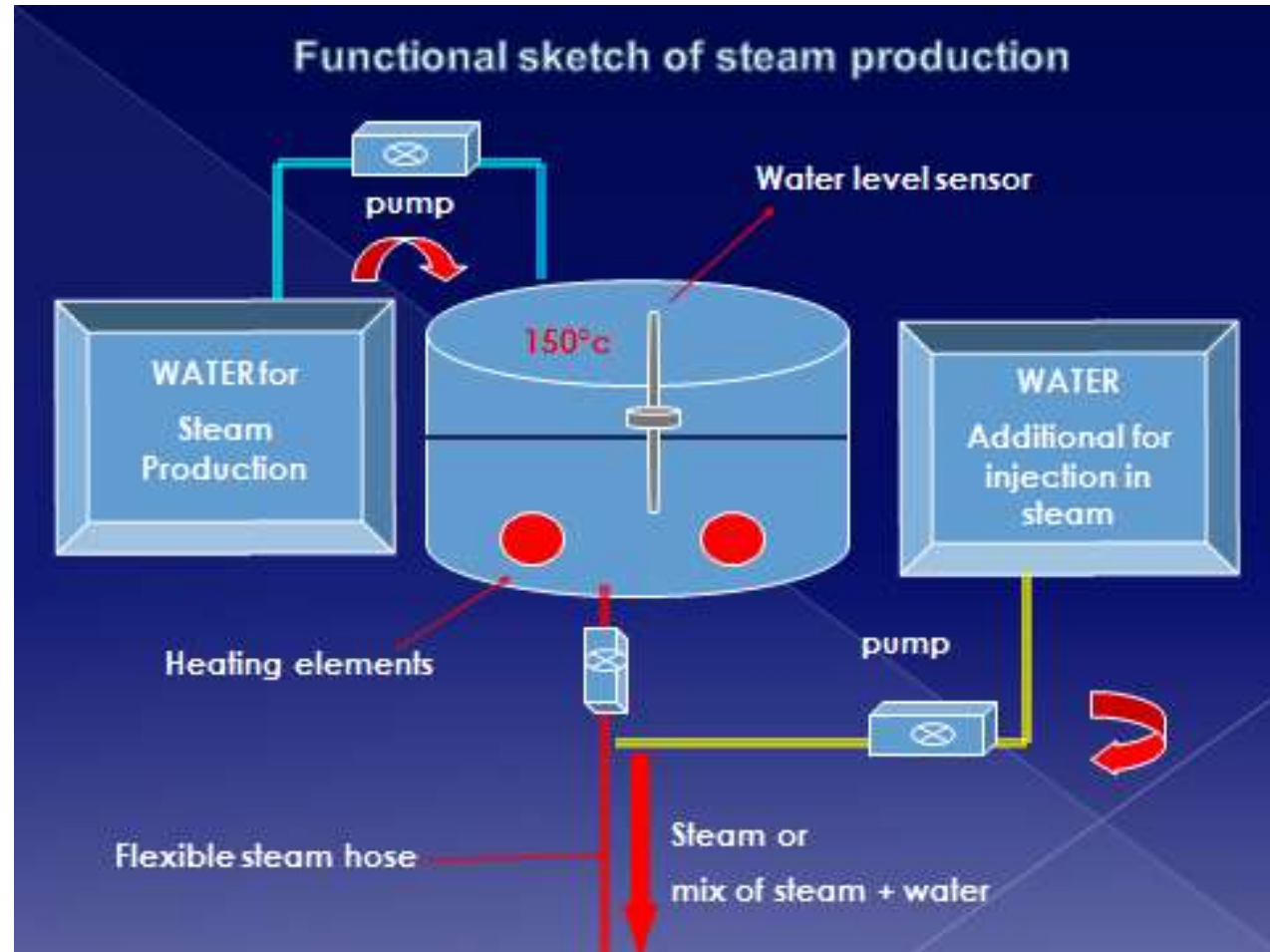
○ EQUIPMENT

○ APPLICATIONS

- Injection of water in a boiler, heating of the boiler with electric elements up to a temperature of 150°. The water is then transformed into steam at 5,5 bars pressure.
- The steam is conducted to a control handle via a flexible hose. The operator fixes on the handle the adequate accessory equipped with a microfiber cloth that he wishes to use according to his task.
- The operator passes on the surface the accessory at a normal speed (10 cm per sec) to get a very efficient cleaning and disinfecting of the surface.
- The surfaces are cleaned and disinfected in 1 pass only on the surface



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Benefits

a) EFFICACY

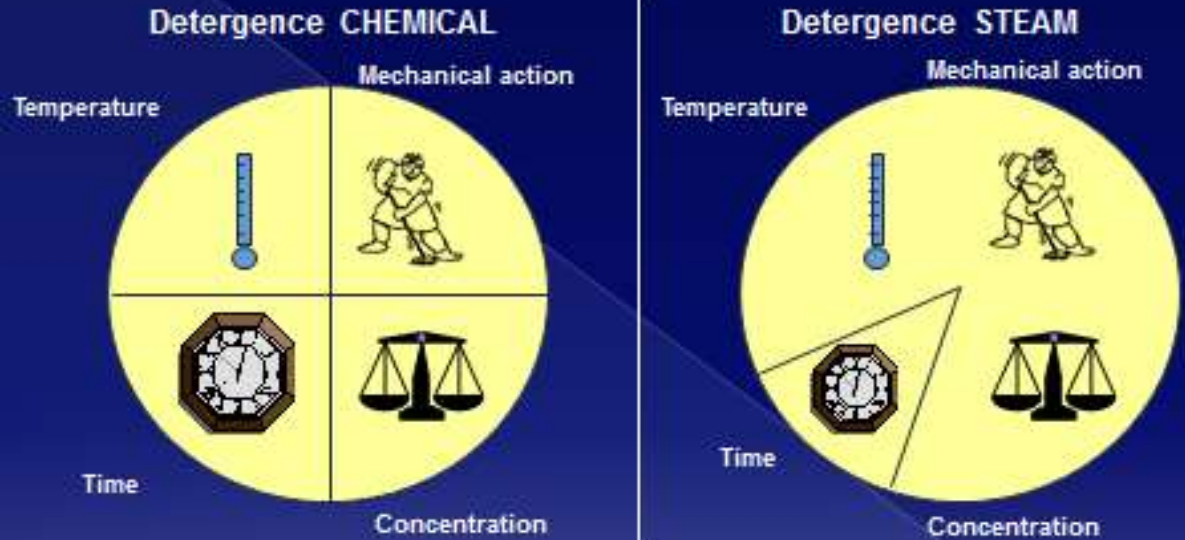


- Detergency action (elimination of soils, residues, biofilm ...)
- Biocidal action (elimination of micro-organisms : bacteria, fungi, viruses...)

validated by tests in laboratories and in situ

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Benefits : detergency action



THE COMBINAISON OF THE MAIN FACTORS INVOLVE IN THE CLEANING ACTION PERMIT RAPID VERY GOOD CLEANING RESULTS ON TREATED SURFACES

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Benefits : Biocidal action

BIOCIDAL EFFICACY OF SANIVAP STEAM BIOCLEANING

The disinfection tests have been made according to European standards. Results demonstrate that, following 1 pass on the test surface, there a reduction of viable micro-organisms as follows:

- > 5,0 log₁₀ for bactericidy
- > 4,0 log₁₀ for fungicidy
- > 4,0 log₁₀ for mycobactericidy
- > 4,0 log₁₀ for virucidy
- > 4,0 log₁₀ for sporicidy (with H₂O₂ injection)



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Benefits

b) Simple and economical

- Detergence et disinfection are ensured in 1 pass on the surface
- No utilization of chemical detergent and disinfectant, giving significant savings and improved work conditions



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Benefits

c) Rapidity



- Steam biocleaning provides cleaning and disinfecting action in 1 operation, thus saving time
- Treated surfaces remain clean longer time due to absence of chemical film on surface

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Benefits

d) Ecology and environmental care

- No utilisation of chemical products
- Very low water consumption
- No polluted reject



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TESTING METHOD FOR EVALUATION OF BIOCIDAL ACTIVITIES ACCORDING TO EUROPEAN STANDARDS

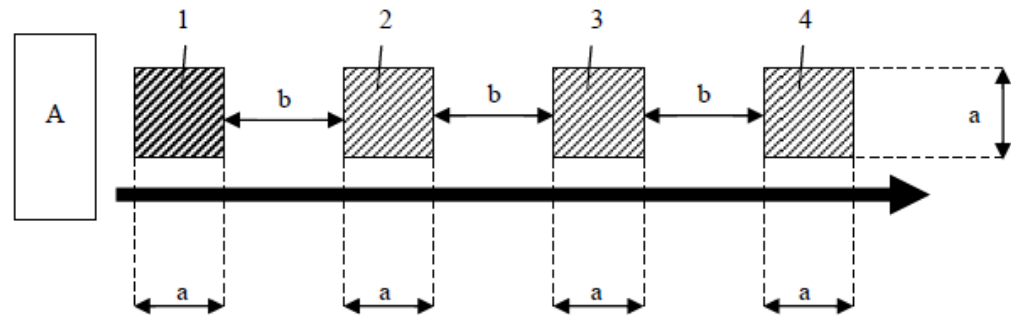


Figure 1 : Schematic representation of the test areas on the test surface. $a=5$ cm ; $b=7$ cm. A: Position of the steam disinfection process before testing. → Displacement of the steam disinfection process during testing (10 cm/s)

DESINFECTING PERFORMANCES STEAM ONLY



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RESULTS OF DISINFECTION EFFICACY TESTS: BACTERIA, FUNGI, YEASTS, MYCOBACTERIA AND SPORES

Evaluation of the efficacy of SANIVAP steam disinfection equipment SP400. Number of viable microorganisms on test surfaces before (Nw) and after (N) treatment by the SANIVAP steam disinfection process. Mechanical effect (Nm). Mean of viable microorganisms transferred from the contaminated areas (C4 to C6) to the non-contaminated areas (C1 to C3 and C7 to C15) (N') R: logarithmic reduction.

		BACTERIA				FUNGI - YEASTS		MYCOBACTERIA	SPORES
		<i>Pseudomonas aeruginosa</i> CIP 103467	<i>Staphylococcus aureus</i> CIP 4.83	<i>Enterococcus hirae</i> CIP 5855	<i>Escherichia coli</i> CIP 54127	<i>Candida albicans</i> CIP 48.72	<i>Aspergillus brasiliensis</i> CBS 788.33	<i>Mycobacterium terrae</i> CIP 104321	Spores de <i>Bacillus subtilis</i> CIP 52 62
Nw (Nb.CFU/ test area)		1,3x10 ⁶	4,0x10 ⁶	2,5x10 ⁶	3,9x10 ⁶	1,3x10 ⁵	1,9x10 ⁵	4,9x10 ⁶	2,6x10 ⁴
Nm (Nb.CFU/test area)		3,0x10 ⁵	4,1x10 ⁶	2,5x10 ⁶	3,2x10 ⁶	1,0x10 ⁵	1,4x10 ⁵	4,8x10 ⁶	8,2x10 ³
N (Nb. CFU test area)	Nc ₄	<1	<1	32	2	<1	<1	6	88
	Nc ₅	<1	<1	5	1	<1	<1	11	47
	Nc ₆	<1	1	9	3	<1	<1	13	40
N'	N' C1 to C3 and C7 to C15	<10	<10	<10	<10	<10	<10	<10	11
N'm	N'm C1 to C3 and C7 to C15	<10	<10	<10	<10	<10	<10	<10	<10
Logarithmic reduction R		>5,5	6,6	5,3	6,2	>5,0	>5,1	5,7	2,1

DESINFECTING PERFORMANCES STEAM ONLY



STUDY 15 - 1850

RESULTS OF DISINFECTION EFFICACY TESTS ON MULTI RESISTANT BACTERIA – FUNGI / YEASTS AND ON VIRUSES

Evaluation of the efficacy of SANIVAP steam disinfection equipment SP400. Number of viable microorganisms on test surfaces before (Nw) and after (N) treatment by the SANIVAP steam disinfection process. Mechanical effect (Nm). Mean of viable microorganisms transferred from the contaminated areas (C4 to C6) to the non-contaminated areas (C1 to C3 and C7 to C15) (N') R: logarithmic reduction.

		MULTI RESISTANT BACTERIA				FUNGI - YEASTS		VIRUSES		
		<i>Pseudomonas aeruginosa</i> Multi R (incl ESBL)	<i>Acinetobacter baumannii</i> Multi R	<i>Klebsiella pneumoniae</i> ESBL	<i>Enterobacter cloacae</i> Carbapenemase	<i>Geotrichum candidum</i> IP 285.54	<i>Aspergillus flavus</i> IP 2464.98	<i>Murine Norovirus</i> TIB-71	<i>Adenovirus type 5</i> CCL-2	<i>Coronavirus</i> CCL-81
Nw (Nb.CFU/ test area)		1,11x10 ⁵	9,56x10 ⁶	1,33x10 ⁶	7,31 10 ⁶	3,8x10 ³	8,9x10 ⁵	4,9	5,0	5,2
Nm (Nb.CFU/test area)		4,23x10 ⁵	9,63x10 ⁶	3,36x10 ⁶	5,44x10 ⁶	4,17x10 ³	6,6x10 ⁵	4,8	4,1	4,7
N (Nb. CFU test area)	Nc ₄	<1	<1	<1	<1	<1	88	<1	<1	<1
	Nc ₅	<1	<1	<1	<1	<1	47	<1	<1	<1
	Nc ₆	<1	1	<1	<1	<1	40	<1	<1	<1
N'	N' C1 to C3 and C7 to C15	<10	<10	<10	<10	<10	11	<10	<10	<10
N'm	N'm C1 to C3 and C7 to C15	<10	<10	<10	<10	<10	<10	<10	<10	<10
Logarithmic reduction R		>5,6	>7,0	>6,5	>6,7	>3,6	>5,0	>4,6	>4,7	>4,9

DESINFECTING PERFORMANCES STEAM + HYDROGEN PEROXIDE

STUDY 15 - 1850



RESULTS OF DISINFECTION EFFICACY TESTS ON SPORES: BACILLUS AND CLOSTRIDIUM DIFFICILE

Evaluation of the efficacy of SANTIVAP steam disinfection equipment SP540H. Disinfection process: steam + solution of hydrogen peroxide at 7.5% concentration. Concentration of hydrogen peroxide after mix with steam: maximum 3.5%.

Number of viable microorganisms on test surfaces before (Nw) and after (N) treatment by the SANTIVAP steam disinfection process.
Mechanical effect (Nm). Mean of viable microorganisms transferred from the contaminated areas (C4 to C6) to the non-contaminated areas (C1 to C3 and C7 to C15) (N') R: logarithmic reduction.

		<i>Bacillus cereus</i> CIP 105.151	<i>Clostridium difficile</i> NCTC 13366
Nw (Nb.CFU/ test area)		1,5x10 ⁴	0,66x10 ⁴
Nm (Nb.CFU/test area)		2,18x10 ⁴	0,67x10 ⁴
N (Nb. CFU test area)	Nc ₄	<1	<1
	Nc ₅	<1	<1
	Nc ₆	<1	1
N'	N' C1 to C3 and C7 to C15	<10	<10
N'm	N'm C1 to C3 and C7 to C15	<10	<10
	Logarithmic reduction R	4,3	>3,8

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DESINFECTING PERFORMANCES STEAM+H²O²

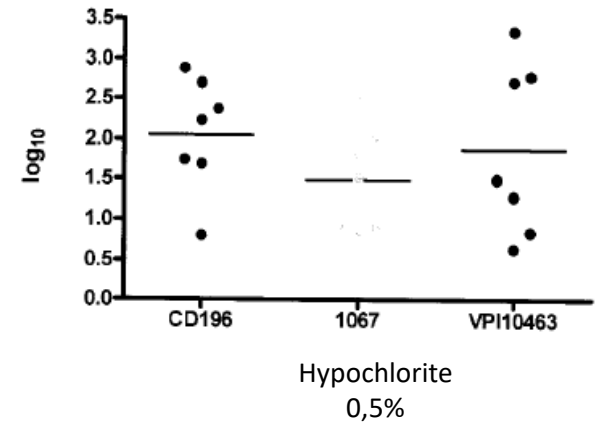
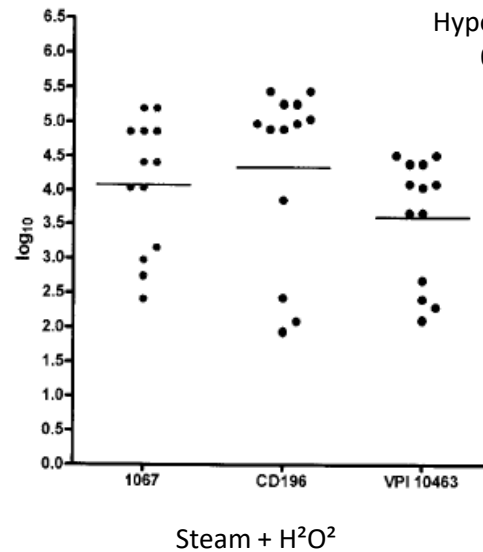
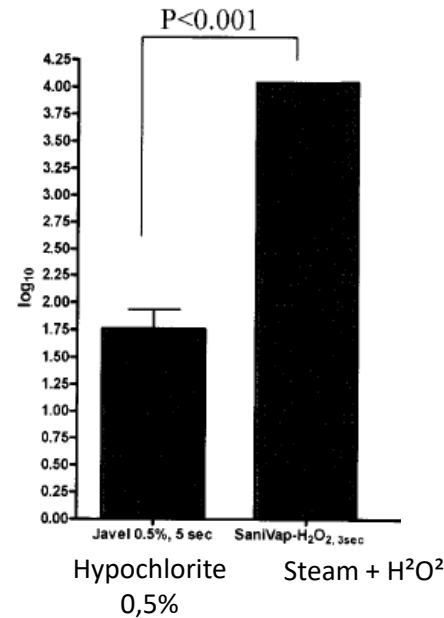
		Microorganisms		
		<i>Staphylococcus aureus</i> CIP 4.83	<i>Candida albicans</i> IP 48.72	<i>Aspergillus niger</i> ATCC 16404 spores
Tc (Nb CFU/ml)		6.6x10 ⁹	4.2x10 ⁸	5.0x10 ⁷
Nw (Nb.CFU/carrier)		1.4x10 ⁷	4.1x10 ⁶	5.0x10 ⁶
Log ₁₀ (Nw)		7.2	6.6	6.7
N (Nb. CFU/carrier)	assay 1	<1.4x10 ¹	<1.4x10 ¹	<1.4x10 ¹
	assay 2	<1.4x10 ¹	<1.4x10 ¹	<1.4x10 ¹
	assay 3	<1.4x10 ¹	<1.4x10 ¹	<1.4x10 ¹
\bar{N} (Nb.CFU /carrier)		<1.4x10 ¹	<1.4x10 ¹	<1.4x10 ¹
Log ₁₀ (\bar{N})		<1.1	<1.1	<1.1
R		> 6.0	> 5.5	> 5.6



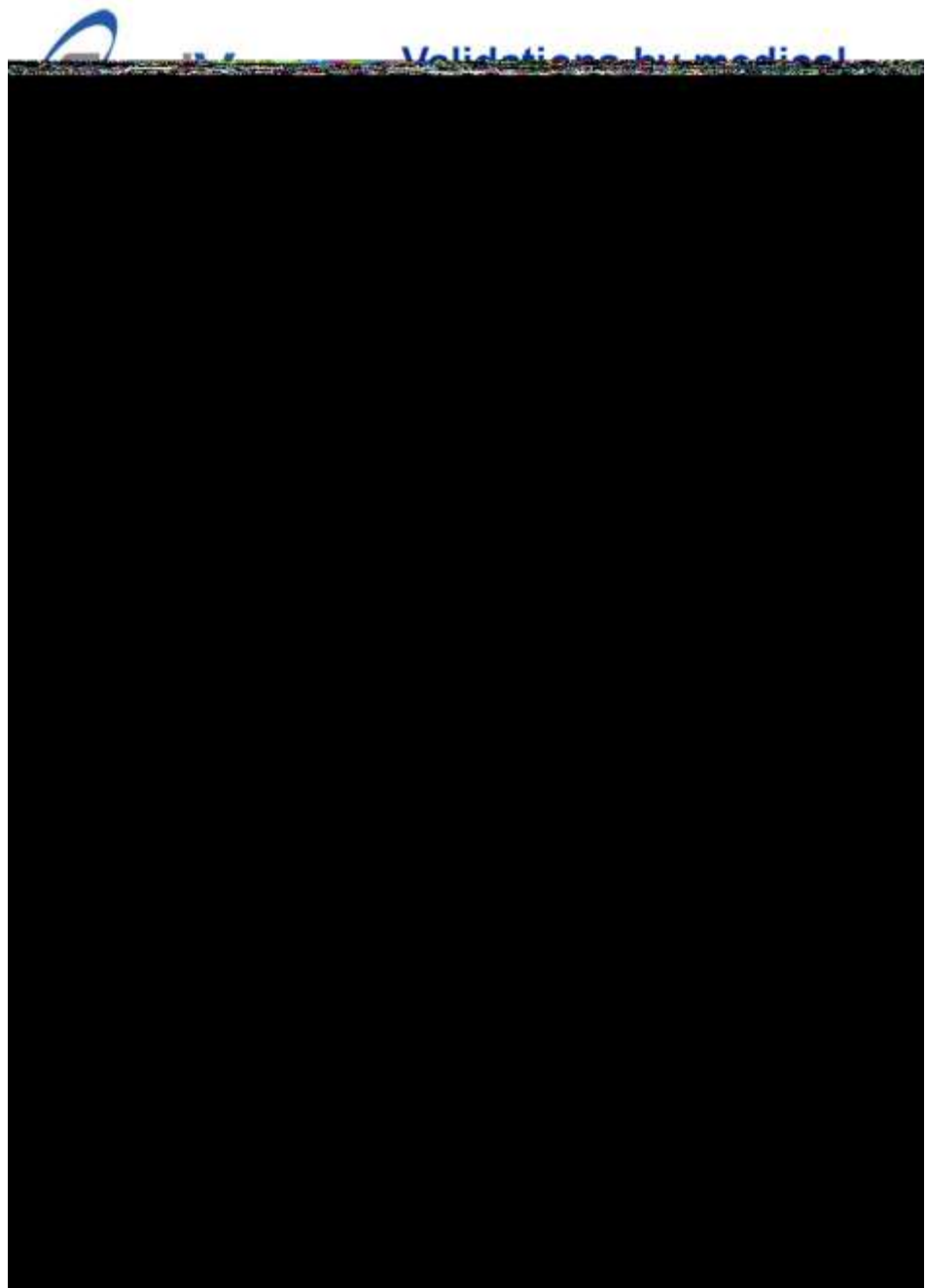
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DESINFECTING PERFORMANCES STEAM+H²O²

Clostridium difficile



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- French Health Authorities recommendations for steam biocleaning
- Recommendations from Health Society for Hospital Hygiene
- SANIVAP certifications :
 - ISO 13485
 - CE Medical device
 - ISO 9001



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RANGE OF PRODUCTS

The equipment range will consist of :

- **4 steam generators with different :**
 - **Power**
 - **Size**
 - **Functionalities**
- **A complete new range of accessories**
- **A complete range of microfiber clothes**
- **2 biocleaning trolleys**

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NF EN ISO 13485 : 2012



ISO 9001 : 2008

Cleaning and disinfecting
steam equipment

STEAM GENERATOR

SP400



TECHNICAL SPECIFICATIONS

• Boiler	
• capacity	3,5 L
• material / quality	stainless steel 316L
• steam pressure	5 bars
• steam temperature	150°C
• self-filling device	yes
• steam outflow	0 à 150 g/min
• Electric power	
• voltage	230v – 50/60Hz
• boiler	2750w
• internal, dismantable and anti-corrosion resistance	
• total power	2800w
• Tanks capacity	
• water tank for steam production	4,6 L
• filter on steam output	yes
• Electric protection	
• product	IP 44
• waterproof electronic and electric box	IP 56
• Weight / size	
• steam hose professional	4,5 m
• electric cable in neoprene	10 m
• product	19 Kg
• size	L 42 x l 30 x h 43 cm
• Homologation / certifications	
• CE medical devices	LNE 0459
• SANIVAP is certified :	ISO 13485 - ISO 9001
• Warranty : 1 year (parts / labour and transportation cost or local repair by accredited technician)	
• Boiler warranty : 3 years according to SaniVap warranty conditions	

The SP400 biocleaning steam system ensures the complete cleaning and disinfecting of all kind of surfaces : floors, vertical surfaces, furniture, equipment, medical devices...

The constant steam quality of the SP400 ensures its effectiveness in terms of cleanliness and disinfection.

The SP400 is especially designed for intensive use **up to 8 hours per day**.

The SP400 steam system is ergonomic, easy to operate and very suitable for daily usage in accordance with SANIVAP protocols.

The wide range of adaptable accessories contributes to its effectiveness and versatility.



SP400KIT



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Cleaning and disinfecting steam equipment

SP400

STEAM QUALITY

- **Conception of the boiler**
 - Internal, dismountable and anti-corrosion resistance
 - Quality material (316L austenitic stainless steel)
 - Self filling magnetic system
 - High boiler insulation
 - Optimized performance ratios of the boiler : power / pressure / steam outflow
- **Conception of fluid circuits**
 - Electronic monitoring of steam pressure and temperature to secure disinfection efficacy.
 - Steam output regulation – 6 levels
 - Steam stainless steel filter protecting electro valve
 - Self-filling magnetic contactor
 - Filter on water tank
 - Easy drain of the boiler with safety valve
 - Easy drain of water tank

PRODUCT QUALITY

- **Quality of material**
 - Structure and components in stainless steel , ABS, Aluminium
 - Stainless steel boiler 18/10 quality AISI 316L
 - Wheels high quality standard
- **Safety**
 - Hand contactor on steam handle
 - Device fully protected - IP 44
 - Electric and electronic box waterproof - IP 56
 - Neoprene electric cable 10m (3x2.5mm)
 - Alarm : lack of water for boiler supply
 - Lack of water security for boiler protection
- **Ergonomics**
 - Ergonomic hand contactor on steam handle
 - Ergonomic steam handle
 - Easy accessories connexion
 - Easy draining and steam cleaning of water tank
 - Range of ergonomic accessories
 - Ergonomic steam biocleaning trolley
 - LCD control screen for operator (steam output, water level in tank...)



Ergonomic steam hose and handle



Sensitive switches and LCD control screen

SP400 :

Flexible steam hose 4,5 m SP45
Refill can - sealing kit

SP400KIT :

SP400 +
Bio cleaning trolley SP150
Accessories kit : SP200+ SP220
SP230 + SP240 + SP250



SP200 : Bent steam nozzle



SP220: Brush 20cm
SP230: Brush + rubber wiper



SP240: Microfiber mount.

SV250 : Floor Steam MOP

PROTOCOLS AND TRAINING

- Training provided for use of the steam system and its regular maintenance
- Suitable protocols at disposal

TECHNICAL ASSISTANCE

- Technical assistance to the users for an optimal use of the steam system
- Availability of maintenance contracts
- After Sales Service provided by accredited national network

ACCESSORIES RANGE

- The SANIVAP long experience has enabled to develop a wide range of ergonomic accessories : suitable for cleaning and disinfecting protocols.
- The technical microfiber range associated to the SANIVAP accessories optimizes the performance of the steam system.

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Cleaning and disinfecting steam equipment

STEAM GENERATOR SP540H



TECHNICAL SPECIFICATIONS

- Boiler
 - capacity 3,5 L
 - material / quality stainless steel 316L
 - steam pressure 5 bars
 - steam temperature 150°C
 - self-filling device yes
 - steam outflow 0 à 150 g/mn
- Electric power
 - voltage 230v – 50/60Hz
 - boiler 2750w
 - internal, dismantable and anti-corrosion resistance
 - total power 2850w
- Tanks capacity
 - water tank for steam production 8 L
 - filter on steam output yes
- Electric protection
 - product IP 44
 - waterproof electronic and electric box IP 56
- Weight / size
 - steam hose professional 4,5 m
 - electric cable in neoprene 10 m
 - product 23 Kg
 - size L 42 x l 30 x h 48 cm
- Homologation / certifications
 - Conformity to norm NF-T72-281 : 2009
 - SANIVAP is certified : ISO 13485 - ISO 9001
- Warranty : 1 year (parts / labour and transportation cost or local repair by accredited technician)
- Boiler warranty : 3 years according to Sanivap warranty conditions

The SP540H steam system ensures a high level disinfection thanks to its patented system combining steam and a solution of hydrogen peroxide.

The SP540H provides the following benefits :

- Very high disinfection efficacy including on MRSA, CRE, C.Difficile spores.
- Reduction of operating costs in terms of time and absence of chemical usage.
- Preservation surface and equipment integrity.
- 100% ecological : no chemical usage and related polluted reject.
- No risk for operator thanks to very low concentration of H₂O₂ solution used.

The SP540H is especially designed for intensive use up to 8 hours per day.

The SP540H can also be used for steam only biocleaning operations.



SP540H-KIT



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Cleaning and disinfecting steam equipment SP540H

STEAM QUALITY

□ Conception of the boiler

- Internal, dismountable and anti-corrosion resistance
- Quality material (316L austenitic stainless steel)
- Self filling magnetic system
- High boiler insulation
- Optimized performance ratios of the boiler :
power / pressure / steam outflow

□ Conception of fluid circuits

- Electronic monitoring of steam pressure and temperature to secure disinfection efficacy.
- Steam output regulation – 6 levels
- Connector for hydrogen peroxide tank.
- Steam stainless steel filter protecting electro valve
- Self-filling magnetic contactor
- Filter on water tank
- All fluid circuit adapted to H₂O₂
- Injection chamber of H₂O₂ design to get a perfect homogeneous steam - H₂O₂ mix to ensure disinfection

PRODUCT QUALITY

□ Quality of material

- Structure and components in stainless steel , ABS, Aluminium
- Stainless steel boiler 18/10 quality AISI 316L
- Wheels high quality standard

□ Safety

- Hand contactor on steam handle
- Device fully protected - IP 44
- Electric and electronic box waterproof - IP 56
- Neoprene electric cable 10m (3x2.5mm)
- Alarm : lack of water for boiler supply
- Alarm : lack of H₂O₂ solution
- Condemnable Injection of H₂O₂

□ Ergonomics

- Ergonomic hand contactor on steam handle
- Ergonomic steam handle
- Easy accessories connexion
- Easy draining and steam cleaning of water tank
- Range of ergonomic accessories
- Ergonomic steam biocleaning trolley
- LCD control screen for operator (steam output, water level in water and H₂O₂ tanks...)



Ergonomic steam hose
and handle



Sensitive switches and
LCD control screen



Connexion with tank
MV600-2L

PROTOCOLS AND TRAINING

- Training provided for use of the steam system and its regular maintenance
- Suitable protocols at disposal

TECHNICAL ASSISTANCE

- Technical assistance to the users for an optimal use of the steam system
- Availability of maintenance contracts
- After Sales Service provided by accredited national network

ACCESSORIES RANGE

- The SANIVAP long experience has enabled to develop a wide range of ergonomic accessories suitable for cleaning and disinfecting protocols.

- The technical microfiber range associated to the SANIVAP accessories optimizes the performance of the steam system.

STANDARD EQUIPMENT

SP540H :

Steam hose 4,5 m SP55
Refill can – Hydrogen peroxide
tank connector - sealing kit

SP540H-KIT:

SP540 H +
Bio cleaning trolley SP150



OPTIONAL ACCESSORIES

SP200 : Bent steam nozzle

SP240: Microfiber mount

SP300 : Lance 50 cm

To be used with :

MV600-2L : 2 litres tank of
hydrogen peroxide 7,5%

SV250 : Floor Steam MOP

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Steam cleaning and disinfecting equipment

Accessories

SP250 – SP251: STEAM FLOOR MOP (to be used with MOP MV1410 or MV450V)

- The SP250 or SP251 steam brush is very efficient for cleaning and disinfecting floors, walls and ceilings
- Its patented technology secures optimum disinfection of the treated surfaces.
- The SP250 or SP251 ergonomics ensures easy use and improves productivity.
- Associated with long or short usage Mops, the steam brush SP250 or SP251 leaves no deposit on the treated surfaces. The treated surfaces are dry immediately after steam treatment.
- Its regular use prevents the creation of bactericidal bio-films on the surfaces.

TECHNICAL SPECIFICATION :

	<u>SP250</u>	<u>SP251</u>
• Length of handle	120 cm	60 cm
• Width of MOP base	40 cm	40 cm
• Weight	1,5 kg	1,3 kg

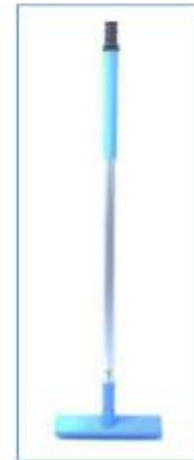


SP260 : STEAM FLOOR BRUSH

- The steam floor brush SP260 is dedicated to the cleaning and disinfecting of hard floors (especially non –skid or slick floors)
- It ensures disinfecting of treated surfaces.
- The SP260 ergonomics ensures easy use and improves productivity .
- The steam floor brush SP260 leaves no deposit on the treated surfaces. The treated surfaces are dry immediately after steam treatment.
- Its regular use prevents the creation of bactericidal bio-films on the surfaces.

TECHNICAL SPECIFICATION

• Length of handle	120 cm
• Brush length	27 cm
• Brush width	7 cm
• Weight	1,2 kg



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Steam cleaning and
disinfecting equipment

Accessories

SP200 : BENT STEAM NOZZLE : (to be used with brushes SP30-SP31-SP32)

- **Applications :** Cleaning and disinfecting of narrow and difficult access areas .
- The SP200 ensures a very efficient bio cleaning of these difficult surfaces



SP210 : CONTACT NOZZLE : (to be used with microfiber cloth MV225)

- **Applications :** Cleaning and disinfecting of complex and difficult access areas .
- The SP210 ensures a very efficient bio cleaning of complex surfaces and tubular structures
- The SP210 ergonomic ensures easy use and improves productivity.



SP220 : HIGH TEMPERATURE BRUSH :

- **Applications :** Cleaning and disinfecting of high surfaces.
- The SP220 brush provides steam at high temperature and thus ensures very efficient bio cleaning of treated surfaces
- The SP220 can be fitted with the microfiber cloth MV334



SP230 : STEAM BRUSH and WIPER 20 CM :

- **Applications :** Cleaning and disinfecting of high surfaces.
- The SP230 steam brush ensures very efficient bio cleaning of treated surfaces especially in the food environment.
- The SP230 enables to fully renovate dirty surfaces



SP240 : MICROFIBER MOUNT 20 CM : (to be used with microfiber cloth MV344-MV345)

- **Applications :** Cleaning and disinfecting of small high surfaces.
- The SP240 with its microfiber cloth MV344 ensures a very efficient bio cleaning of surfaces



SP270 : MOP MOUNT 30 CM : (to be used with Mop MV1404)

- **Applications :** Cleaning and disinfecting of high surfaces.
- The SP270 ensures a very efficient bio cleaning of plane surfaces
- Equipped with a short or long usage MOP, it eliminates residues and dirt from treated surfaces.



SP280 et SP290 : STEAM FLEXO 50 and 25 CM : (to be used with microfiber cloth MV245 and 246)

- **Applications :** Cleaning and disinfecting of high plane and complex surfaces,
- The steam Flexo SP280/290 with its microfiber cloth ensures a very efficient bio cleaning of plane and complex surfaces such as operating theatre lights, mattresses...
- Its ergonomic ensures easy use and improves productivity.



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NF EN ISO 13485 : 2012 ISO 9001 : 2008

Steam cleaning and disinfecting equipment

MICROFIBER CLOTHS

MV 225 : MICROFIBER CLOTH FOR STEAM CONTACT NOZZLE SP210

TECHNICAL SPECIFICATION :

- Composition : 70% polyester / 30% polyamide (100% microfiber)
- Sizes : 22.5 x 2.5 cm
- Washing T° : synthetic cycle 90°C - drying T° : 60°C
- 500 washes – no softening/ no bleach



MV 245 and 246 : MICROFIBER CLOTH FOR STEAM FLEXO SP 280 et 290

TECHNICAL SPECIFICATIONS :

- Composition : 70% polyester / 30% polyamide (100% microfiber)
- Sizes : **MV 245 for SV140** : 55 x 5 cm - **MV 246 for SV141** : 32 x 5 cm
- Washing T° : synthetic cycle 60°C - drying T° : 60°C
- 500 washes – no softening/ no bleach



MV 344 and 345 : MICROFIBER CLOTH FOR MICROFIBER MOUNT SP 240

TECHNICAL SPECIFICATIONS :

- MV344 : simple thickness – MV345 : double thickness
- Composition : 80% polyester / 20% polyamide (100% microfiber)
- Dimensions : 27 x 6.6 cm
- Washing T° : synthetic cycle 60°C - drying T° : 60°C
- 300 washes – no softening/ no bleach



MV 3313 B/R/J/V : MICROFIBER CLOTH

TECHNICAL SPECIFICATIONS :

- Composition : 70% polyester / 30% polyamide (100% microfiber)
- Size : 32 x 32 cm – weight dry : 52 g
- Washing T° : synthetic cycle 60°C - drying T° : 60°C
- 500 washes – no softening/ no bleach



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NF EN ISO 13485 : 2004 ISO 9001 : 2008

Steam cleaning and disinfecting equipment

MICROFIBER CLOTHS

MV 1410 : MICROFIBER FLOOR MOP FOR STEAM MOP SP250

TECHNICAL SPECIFICATIONS :

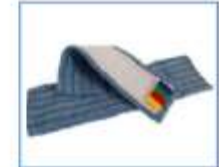
- Composition : 100% polyester + polyamide threads bleu
- Sizes : 50 x 11.5 cm – weight dry: 52 g
- Washing T° : synthetic cycle 90°C – drying T° : 60°C
- 500 washes – no softening/ no bleach



MV 450V : MICROFIBER FLOOR MOP FOR STEAM MOP SP250

TECHNICAL SPECIFICATIONS :

- Composition : 80% polyester / 20% polyamide (50% microfiber)
- Sizes: 46 x 16 cm (Velcro 43 x 11)
- Washing T° : synthetic cycle 90°C – drying T° : 60°C
- 500 washes – no softening/ no bleach



MV 1404 : MICROFIBER MOP FOR MICROFIBER MOUNT 30CM SP 270

TECHNICAL SPECIFICATIONS :

- Composition : 100% polyester (100% microfiber)
- Sizes : 34 x 11 cm
- Washing T° : synthetic cycle 90°C – drying T° : 60°C
- 500 washes – no softening/ no bleach



MV 3545 : MICROFIBER FOR WINDOW GLASSES

TECHNICAL SPECIFICATIONS :

- Composition : 50% polyester / 50% polyamide (100% microfiber)
- Sizes : 32 x 32 cm
- Washing T° : synthetic cycle 60°C – drying T° : 60°C
- 300 washes – no softening/ no bleach



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SP400 SP500 – SP600 KIT



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BIOCLEANING TROLLEYS CONNECTED



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Main applications in healthcare



Operating Theater



Medical devices



Patient room



Neonatal incubators



Emergency vehicles

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OPERATING THEATERS



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PROTOCOLES OPERATING THEATERS

 Biocleaning of the operating theatre at the end of the intervention program			Version Jan 2014
General principles to follow : <ul style="list-style-type: none"> ● Before the first use of any accessory, warm up the steam hose by opening the steam outflow for 10 sec on position 4 of the steam regulation knob, then place the microfiber cloth (for accessories using them) ● Change the microfiber cloth when necessary : as soon as it has become too wet, for each equipment... ● Wipe with a microfiber cloth in the other hand the treated surface when using an accessory which is not fitted with a microfiber ● Make sure to treat the surfaces using a speed for the accessory on the surfaces of around 10cm/sec 			General recommendations : <ul style="list-style-type: none"> → Evacuate all trashes → Respect chronology : <ul style="list-style-type: none"> - from cleanest to the dirtiest , - from highest to lowest → respect all standard recommendation
Type of surfaces	Accessories used and method		Precaution
 Walls, vertical surfaces...	 - use the floor steam MOP or 30 cm brush + MOP if congested surfaces.		- Knob position : 1-2 for floor steam MOP and 30cm steam brush
 Various equipment ...	 - Use 30 cm brush + MOP on planed surfaces.		- knob position : 1-2 - If condensation : 
	 - Use 20 cm brush + microfiber on smaller planed surfaces		- knob position : 1-2 - If condensation : 
	 - Use contact nozzle + microfiber on complex surfaces (tubes, handles....)		- knob position : 1 - If condensation 
	 - Bent steam nozzle can be used on wheels and difficult access areas. - Wipe with a microfiber cloth - Inside basin and plumbing can be treated with a 6cm brush fitted on the accessory .		- knob position : 2 - distance from surfaces to be treated 1 to 3 cm
 Floors	 - treat the surface (1 MOP for around 8 m²)		- before using the steam floor MOP, a damp mopping of the floor has to be made - Knob position : 2 -3

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

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PATIENT ROOMS



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PROTOCOLE PATIENT ROOMS

SaniVap® Steam Cleaning and Disinfecting Equipment		Biocleaning of a patient room		Version Jan 2014
General principles to follow :			General recommendations :	
<ul style="list-style-type: none"> 1 Before the first use of any accessory, warm up the steam hose by opening the steam outflow for 10 sec on position 6 of the steam regulation knob, then place the microfiber cloth (for accessories using them) 2 Change the microfiber cloth when necessary : as soon as it has become too wet, for each equipment... 3 Wipe with a microfiber cloth in the other hand the treated surface when using an accessory which is not fitted with a microfiber 4 Make sure to treat the surfaces using a speed for the accessory on the surfaces of around 10cm/sec 			<ul style="list-style-type: none"> → Evacuate all trashes → Respect chronology : <ul style="list-style-type: none"> - from cleanest to the dirtiest - from highest to lowest → respect all standard recommendations 	
Type of surfaces	Accessories used and method		Precaution	
Walls, vertical surfaces...	 - use the floor MOP or 30 cm brush MOP.		Steam output knob position: - floor mop : 2-3 - 30 cm brush mop : 1-2	
Furniture: bed, table, cupboard..... chair, door knob, interrupters, telephone... 	 - Use 30 cm brush + Mop on large surfaces.		Steam output knob position: - 30 cm brush mop : 1-2- If too much humidity	
	 - Use 20 cm brush+ microfiber cloth on smaller surfaces		Steam output knob position: - 30 cm brush mop : 1-2- If too much humidity	
	 - Use contact nozzle + microfiber cloth on complex surfaces (tubes, knob....)		Steam output knob position: - 30 cm brush mop : 1-2- If too much humidity	
	 - Use bent nozzle for difficult access area and wipe the treated surface with a microfiber cloth		- Always use bent nozzle at a distance less than 1 cm from surface	
Bathroom: toilets, basin, showers...	 - Use the bent nozzle + 6cm brush, for the inside basin and siphon plumbing		- Steam output knob position: 3-4	
Floors	 - Use the floor MOP+ microfiber MOP - 1 MOP for 8 to 12 square meters		- before using the steam floor MOP, a damp mopping of the floor has to be made - Knob position : 2 -3	

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NEONATAL INCUBATOR



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PROTOCOLE NEONATAL INCUBATOR



Biocleaning of a neonatal incubator

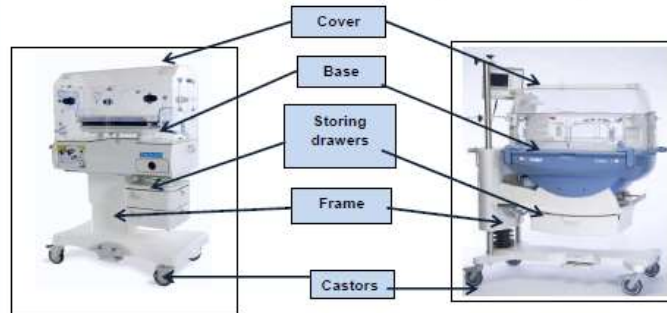
Version
Jan 2014

Operating procedure to follow

- ① Before placing the microfiber cloth on the accessory that you intend to use, drain and warm up the steam hose by opening the steam outflow for 15 sec on position 2 on the steam regulation knob, then place rapidly the microfiber cloth on the accessory and start steam cleaning.
- ② Set the steam regulation knob on position 1 and apply the accessory with microfiber on the surface to be treated at a speed of around 10 cm/s
- ③ Change the microfiber cloth when it is saturated with steam condensation i.e. normally 3 to 4 minutes maximum of continuous work.
- ④ Change the microfiber cloth when you stop the steam outflow for more than 15 sec. Proceed as in step ①



① Incubator general structure



② General procedure to follow

Incubator maintenance:

- Operate from inside to outside, from top to bottom.
- In case of residues, wipe the surface using a pre-impregnated cloth with detergent-disinfectant.

Operator:

- Wear a protection cloth and gloves when disassembling and cleaning the incubator.
- Make sure to maintain perfect hand hygiene during all the operations.

(Always refer to the operating procedure in place in the establishment)

③ Accessories required



- Use the contact nozzle **SV210** with its microfiber cloth **MV225** for all surfaces. Change the microfiber cloth whenever it is saturated with steam condensation i.e. normally 3 to 4 minutes maximum of continuous work. An incubator will require 4 to 5 cloth for complete steam cleaning
- Steam regulation knob: always position 1



Use several dry and clean microfiber clothes for:

- drying the equipment treated with steam in case of excessive residual humidity.

- Cleaning and disinfecting surfaces not treated with steam (electronic panel...) Use microfiber cloth pre-impregnated with disinfectant.

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EMERGENCY VEHICLES



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PROTOCOLE EMERGENCY VEHICLES



Biocleaning of an emergency vehicle



Version
Jan 2014

Operating principles to be followed

- ➊ Before the first use of any accessory, **warm up the steam hose by opening the steam outflow for 10 sec on position 4 of the steam regulation knob, then place the microfiber cloth (for accessories using them)**
- ➋ Change the microfiber cloth when necessary: as soon as it has become too wet, for each equipment...
- ➌ **Wipe with a microfiber cloth in the other hand the treated surface when using an accessory which is not fitted with a microfiber cloth**
- ➍ Make sure to treat the surfaces using a speed for the accessory on the surfaces of around 10cm/sec



➊ Emergency vehicle



Seat

Cupboard

Accessories

Patient
stretcher

➋ General principles to follow

Concerning the vehicle:

- Eliminate all residues
- Take out the equipment
- Treat all surfaces from top to bottom and from dirtiest to cleanest (ceiling, vertical surfaces, horizontal surfaces, floor.)
- From front to rear of the cabin

Concerning the operator:

- careful washing of the hands
- before and after the operations
- before adjusting the gloves
- before manipulating clean equipment, ...
- wearing of non-sterile gloves on hand

➌ Accessories used



→ Use the contact nozzle SP210 fitted with a microfiber cloth for all difficult access surfaces

→ Steam output knob: position 1



→ Treat all planed surfaces with the microfiber support SP240 fitted with a microfiber cloth

→ Wipe out with a microfiber cloth any excess humidity if necessary

→ Steam output knob: position 1



Use several microfiber cloth
cleaned and dry :

→ Wipe out humidity if necessary

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OTHER APPLICATIONS IN HEALTHCARE

- **STERILIZATION UNITS**
Cleaning of hollow instruments (pipes, cannula.....) and orthopedic instruments



- **FOOD and LAUNDRY TROLLEYS**
Cleaning and disinfecting the transport trolleys



- **KITCHENS**
Cleaning and disinfecting equipment and environment surfaces



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conclusion

Steam biocleaning in healthcare settings enables to :

- *Facilitate cleaning and disinfecting operations*
- *Reduce the infection risk coming from the patient environment*
- *Contribute to environmental protection*
- *Improve work conditions of personnel in charge*



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With more than 8000 units sold in the past 13 years, SANIVAP is the leader in Europe for steam cleaning and disinfecting equipment for use in the medical sector.

With the introduction of the new range of products, Sanivap wishes to develop its export commercial activities in new markets.



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THANK YOU FOR YOUR ATTENTION



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