

RESTROOM Cleaning and Sanitizing Program

Cleaning and sanitizing of public restrooms is an important problem worldwide, which has not found yet an optimal solution. Cleaning means removing the visible dirt from all surfaces, while sanitizing means removing not only visible dirt, but also invisible elements like bacteria, which can be responsible for disease transmission. This means that even after cleaning, a truly clean washroom should be periodically sanitized.

Santoemma RESTROOM Cleaning and Sanitizing Program provides innovative and patented systems for cleaning and sanitizing public restrooms of any size. By using specially designed machines, instead of manual work only, restrooms are completely cleaned and sanitized in a short time, with excellent and granted results. It is finally possible to reach a higher level in restroom's hygiene, increase productivity and have a higher fulfillment of the cleaning operators.

Specific systems and machines have been developed by Santoemma, in order to better suit any area, according to the type and dimensions of the restrooms to be cleaned and to their optimal cleaning and sanitizing plan.

Powertec system: the solution for daily cleaning & sanitizing

This system consists in using a unique machine to spray all the surfaces with a chemical solution, rinse the surfaces after few minutes and vacuum all the residual liquid from floor, leaving the room clean, sanitized and dry. This system is suitable to clean and sanitize **small and medium-size** restrooms.

Two models are available: Powertec30 (cable powered) and Powertec30 Battery (battery powered).



Powertec



Powertec Battery



Foamtec system: the power of foam for heavy-duty cleaning

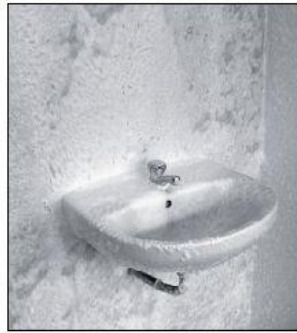
Foam-Rinse-Vacuum system was developed and patented by Santoemma as a revolutionary system to clean and sanitize public restrooms, by foaming, rinsing all surfaces and vacuuming, using a single machine. Foam ensures an extended chemical action on the dirt and bacteria and is therefore ideal for many places which need an heavy duty action.

The cleaning and sanitizing process is carried out through four stages:

1. Foam spraying on al the surfaces (walls, sanitary fixtures, showers, panes)
2. Foam chemical action against dirt and bacteria,
3. Rinsing with fresh water, to remove foam residual from the surfaces
4. Vacuuming of residual liquid from floor.



1 Foaming



2 Chemical action



3 Rinsing



4 Vacuuming

Three different models have been developed, with different capacities and autonomies, in order to adapt to places of different sizes.



Foamtec 15



Foamtec 30



Foamtec 70

The 10 advantages of Foamtec system:

Santoemma patented Foamtec system is the best solution to the problem of cleaning and sanitizing even very dirty restrooms, with several advantages on any other cleaning system:



1. **Better cleaning and sanitising result** : foam does not immediately fall onto the floor, but stays on the surfaces where it has been sprayed for some minutes. The foam prolonged action assures to make the most of the cleaning effect of the product, ensuring both cleaning and sanitizing effect.
2. **Visual effect** of foam: foam covers in white all the surfaces where it is sprayed such as walls, sinks, fixtures. The operator can therefore check that every corner has been covered, for a complete action in every point.
3. **The greatest hygienic safety for the worker** , who does not come in contact with the surfaces and the objects to be cleaned and who does not get wet by the bouncing water, because rinsing is done with low pressure.
4. **Reduced labour for the worker** : manual work is reduced to a minimum since the dirt is removed by the chemical action of foam and the mechanical action of rinsing.
5. This system, more comfortable and hygienic, gives a **greater fulfilment** to the worker.
6. **Saving of time** : while foam acts on the surfaces where it has already been sprayed, the worker is free to operate on other surfaces. Therefore, even a big room can be completely cleaned quickly and with no idle time.
7. **Detergent saving** : the chemical is used without waste because it does not immediately fall onto the floor.
8. **Reduced power consumption** : the machine requires little electrical power and therefore it can be used in any place.
9. **Reduced water consumption** : the system foam + rinse at low pressure requires a minimal quantity of water. This avoids the flood of rooms, allows a longer working autonomy and offers the immediate availability of the rooms that have been cleaned.
10. The machine can be used also in **places with no drains** because it can completely vacuum the water remaining on the floor after rinsing.

IdroFoamRinse: cleaning areas with no need for vacuuming

IdroFoamRinse is an innovative machine, electrically powered, allowing to spray foam and rinse continuously. The water used for foaming and rinsing is directly taken from the water network, therefore the machine has an unlimited autonomy. Pure chemical is contained in its separate tank, having a volume up to 25 litres, and it is automatically used by the machine in a controlled quantity.



IdroFoamRinse is indicated to clean all the areas where the presence of a drain in the floor makes vacuuming not necessary, such as for example: **showers, saunas, swimming pools, camping grounds.**

Chemicals

Santoemma developed a simple but complete range of chemicals, suitable to perform specific actions. Laboratory tests certify that the application of Santoemma chemicals on a surface for 3 minutes allows to kill 99,9% of specific bacteria, confirming the effectiveness of their sanitizing action.

SANI-FOAM is a specific chemical for maintenance cleaning and sanitizing. It leaves a pleasant scent in the rooms.

SUPER-FOAM is a strong degreasing chemical, with high pH, for restoration cleaning and fat removal.

ACID-FOAM is an acid chemical which can be periodically used to remove lime from showers, sanitary fixtures and other surfaces.



Accessories

All the machines are provided with the necessary accessories allowing to spray/foam, rinse and vacuum. According to the model, other accessories are supplied as standard or optional, such as: pane wiper, floor wiper, fleece. All the accessories can be stored on the machine, so they can be easily used and carried.

Thanks to a special accessory put on the floor, it is also possible to start vacuuming the liquid from floor, while the operator is rinsing. In this case, the wet vacuum tool is used in the end to dry the floor completely.



Application fields

The machines of Santoemma RESTROOM Cleaning and Sanitizing Program can be conveniently used in in any public restroom. For each area, the best solution can be chosen according to the restroom type and to the operator's cleaning preference. The following table shows the most suggested solutions for each area:

	Powertec30	Powertec30Battery	Foamtec 15	Foamtec 30	Foamtec 70	IdroFoam Rinse200	IdroFoam Rinse400
Restaurants, Fast foods	X	X					
Pubs, Discotheques	X	X	X	X			
Motorways café	X	X	X	X			
Offices	X	X					
Factories	X	X	X	X	X		
Shopping centres	X	X	X	X			
Exhibition halls	X	X		X	X		
Cinemas, theatres	X	X	X	X			
Stadiums, arenas		X		X	X		
Nursing homes	X	X	X	X			
Hospitals		X	X	X			
Schools, Universities	X	X	X	X			
City public WC	X	X	X	X			
Public showers			X	X		X	X
Barracks				X		X	X
Ferries, Cruise ships	X	X	X				
Airports		X		X	X		
Railways stations				X	X		
Fitness centres	X	X	X	X		X	X
Swimming pools			X	X		X	X
Saunas & Spas			X	X		X	X
Hotels (Spas and common areas)		X		X			
Camping grounds				X		X	X
Garbage storage bins and rooms			X	X		X	X

Comparative Technical Data and performances

	Powertec30	Powertec30Battery	Foamtec 15	Foamtec 30	Foamtec 70	IdroFoam Rinse200	IdroFoam Rinse400
Recovery tank capacity:	30 litres	30 litres	14 litres	30 litres	70 litres	-	-
Clean water tank capacity:	30 litres	30 litres	14 litres	30 litres	70 litres	-	-
Continuous filling system:	YES	YES	YES	YES	YES	YES	YES
Vacuum motor: Power: Maximum waterlift: Maximum air-flow:	2 stages 1000 W 2200 mm H2O 50 l/sec.	2 stages 350 W 1100 mm H2O 35 l/sec.	2 stages 1000 W 2200 mm H2O 50 l/sec.	2 stages 1000 W 2200 mm H2O 60 l/sec.	2x2 stages 1000 W 2200 mm H2O 120 l/sec.	-	-
Pump with bypass: Power: Maximum pressure: Maximum water-flow:	membrane, int. by-pass 80 W 9 bar 4,5 l/min	membrane, int. by-pass 80 W 9 bar 4,5 l/min	membrane, int. by-pass 80 W 9 bar 2 l/min	Piston type, adj. pressure 180 W 28 bar 4 l/min	Piston type, adj. pressure 180 W 28 bar 4 l/min	membrane, int. by-pass 80 W 9 bar 4 l/min	Piston type, adj. pressure 180 W 28 bar 4 l/min
Compressor:		-	350 W	350W	350W	350W	350W
Approximate performances:	room with 100 m2 of tiles + 15 sanitary fixtures in 20 minutes	room with 100 m2 of tiles + 15 sanitary fixtures in 20 minutes	room with 25 m2 of tiles + 5 sanitary fixtures in 10 minutes	room with 50 m2 of tiles + 10 sanitary fixtures in 15 minutes	room with 120 m2 of tiles + 20 sanitary fixtures in 25 minutes	room with 25 m2 of tiles +5 sanitary fixtures in 10 minutes	room with 120 m2 of tiles +20 sanitary fixtures in 20 minutes
Water consumption:	30 litres	30 litres	14 litres	30 litres	70 litres	-	-
Chemical consumption:	500 grams	500 grams	250 grams	500 grams	1200 grams	250 grams	1200 grams
Defoamer consumption:	-	-	max 30 grams	max 30 grams	max 70 grams	-	-
Chemical dilution:	Pre-set around 4%	Pre-set around 4%	Pre-set around 4%	Pre-set around 4%	Pre-set around 4%	Pre-set around 4%	Pre-set around 4%
Cable length:	10 m	-	10 m	10 m	10 m	10 m	15 m
Gel Batteries:	-	2x12V - 44Ah	-	-	-	-	-
Batteries autonomy:	-	8 hours	-	-	-	-	-
Weight (machine body):	35 Kg	81Kg	50 Kg	74 Kg	95 Kg	42 Kg	58 Kg
Weight (packaged machine):	47 Kg	101 Kg	77 Kg	100 Kg	120 Kg	62 Kg	72 Kg
Dimensions:	cm 38 x 60 x 78 (h)	cm 38 x 70 x 105 (h)	cm 38 x 70 x 113 (h)	cm 38 x 80 x 105 (h)	cm 50 x 89 x 115 (h)	cm 42 x 68 x 87 (h)	cm 60 x 87 x 98 (h)
Package dimensions:	cm 47 x 82 x 106 (h)	cm 47 x 82 x 132 (h)	cm 47 x 82 x 100 (h)	cm 60 x 95 x 122 (h)	cm 65 x 102 x 130 (h)	cm 47 x 82 x 83 (h)	cm 65 x 102 x 86 (h)
Spray hose/Vacuum hose length:	5/5 m	5/5 m	5/5 m	10/7,5 m	10/7,5 m	10m	10m
Standard colors:	Blue	Blue	Blue	Blue	Blue	Black	Black
Accessories for injection-extraction carpet cleaning	Optional	NO	Optional	Optional	Optional	NO	NO
Tank construction:	High density polyethylene					-	