

# SANITARY GATE

## SANITIZING TUNNEL

TESTED SANITISATION METHOD

# SANITARY GATE

Sanitary Gate is a tested, safe, and effective method to sanitise people and objects in just 5 seconds, killing up to 99% of any pathogenic microbes on the surfaces, including COVID-19.

The sanitising method of Sanitary Gate consists in nebulising any kind of disinfectant or sanitiser through a high precision system integrated inside a retractable tunnel.

The tunnel retains the atomised sanitising product which saturates the environment. In this way, it is possible to disinfect all surfaces, even in the most hidden places.

The system can nebulise sanitising solutions in a concentrated formula to be diluted with water from the mains or in a ready-to-use diluted formula.











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SANITARY GATE  
SANITIZING TUNNEL

SANITARY GATE  
SANITIZING TUNNEL

cafe





SANITISING  
PEOPLE



SANITARY GATE  
SANITIZING TUNNEL







Sanitary Gate was designed to prevent contagion, as it can be used to instantly break down the viral and bacterial load on clothes.

The spray created by Sanitary Gate does not wet the surfaces that go through it.

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Sanitary Gate can be easily installed at the entrance of high-traffic places, such as train stations, airports, and supermarkets, making them safer.











Sanitary Gate can also be used to maintain a high level of safety within a company, as it can sanitise the staff at every entrance on a daily basis.





Sanitary Gate can make safer places like construction sites and in general all those workplaces where an adequate level of environmental safety cannot be guaranteed.









SANITISING  
GOODS AND  
EQUIPMENT

SANITARY GATE | XL  
SANITIZING TUNNEL



DISINFECTION TUNNEL







Sanitary Gate is a safe protection also for public and private companies: in a few minutes it is possible to sanitise the workforce and items before entering the manufacturing facilities to help maintaining a high level of hygiene.

Sanitary Gate is available in XL size with front and back closure to contain and sanitise any kind of goods or equipment.

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SANITARY GATE XL  
SANITIZING TUNNEL



DISINFECTION

TRIVELLATO

EX 4930E





TUNNEL

SIVTAR GATE AL





SANITARY GATE XL  
SANITIZING TUNNEL

DISINFECTION TUNNEL

SANITARY GATE XL  
SANITIZING TUNNEL

CROCE ROSSA ITALIANA  
CENTO - BONDENO

CR1 A097C





# SANITISING VEHICLES



SANITARY GATE  
SANITIZING TUNNEL

DISINFECTION TUNNEL



CROCE ROSSA ITALIANA







Sanitary Gate is also available in the XL version with front and rear curtains to store and decontaminate all equipment and emergency vehicles.

In the healthcare sector Sanitary Gate is an efficient tool to sanitise in a few minutes ambulances and any mobile healthcare units.

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The high-pressure spray system effectively saturates the environment, the disinfectant penetrates inside the patient and driver compartments decontaminating each surface.







# TECHNICAL DETAILS



## AVAILABLE MODELS

### SANITARY GATE SANITIZING TUNNEL



### SANITARY GATE XL SANITIZING TUNNEL



**NB:** For special requirements, Sanitary Gate can also be made to measure.



# DESCRIPTION

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Sanitary Gate consists of the following::

- **RETRACTABLE TUNNEL**

A retractable tunnel made of aluminium profiles, stainless steel fasteners, and PVC sheets with a Class 2 fireproofing certificate.

The structure is integrated with the following additional components:

- Spraying devices (spray nozzles or spray guns, depending on the type of system chosen);
- Presence detector photocells on dedicated brackets.  
The photocell sensors are fitted as standard on Sanitary Gate and can be installed upon request on Sanitary Gate XL);
- A two-light traffic light (red and green) with 24 V low consumption LEDs.

Both the traffic light and the photocells have a pre-wired system and are connected to the control unit via a quick-fitting connector.

It is recommended to place inside the Sanitary Gate a 3M Nomad™ Terra 8100 outdoor carpet (not supplied by Giulio Barbieri S.r.l.) with an open-weave structure. As the carpet gets infused with the sanitising substance, it can also disinfect surfaces that come into contact with the ground.

- **SPRAYING SYSTEM**

A spraying system housed inside a protective metal container.

The spraying system is available in the following versions:

**A) Spraying system with an electric hydraulic pump** that can use either a concentrated product mixed with mains water with the help of an integrated dosing unit or a ready-to-use blend;

**B) A compressed air spraying system for a ready-to-use blend** with pneumatically operated components, which do not need to be connected to the power supply.

Both types of systems are designed to deliver Drop 360° and any other type of disinfecting or sanitising substance available on the market.

## INSTALLATION

- Sanitary Gate and Sanitary Gate XL are supplied completely pre-assembled, with a dispensing system and an electrical system: this allows for a quick installation and makes it possible to fold the tunnel up manually in a just few minutes, leaving the area free and clear. The installation can, therefore, also be carried out by external technicians. Simply consult the practical instruction manual provided with the product.

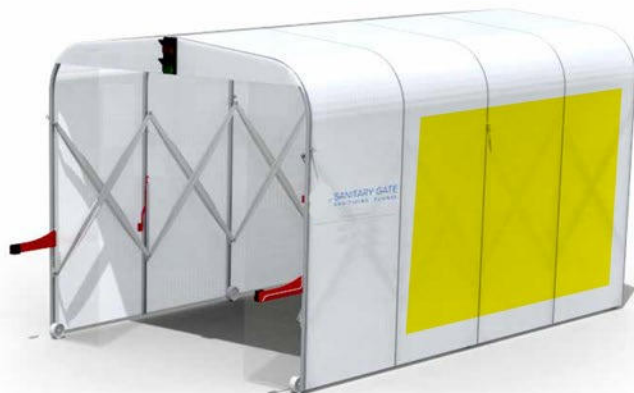
## CERTIFICATION AND WARRANTY OF THE STRUCTURE

- The individual components of the structure are CE certified.
- The structures are checked at the loads provided for by the standards in force EN 13782, Ministerial Decree 17 January 2018 Technical Standards for Constructions (NTC), and UNI EN 1991.
- The structures come with a 5-year warranty.

## BRANDED CUSTOMISATION

Sanitary Gate can be customised with a branded design in the spaces highlighted in yellow in the figure.

The PVC sheet is divided into individual modules that can be removed from the profiles and replaced individually in a short time and at a low cost.





# SPRAYING SYSTEMS







# SPRAYING SYSTEM WITH AN ELECTRIC HYDRAULIC PUMP

The system uses either a concentrated product  
(with an integrated dosing unit)  
or a ready-to-use blend.

## COMPONENTS

This type of system consists of:

- A retractable tunnel equipped with the following integrated components:
  - spraying nozzles;
  - a two-light (green-red) traffic light;
  - presence detector photocells (fitted as standard on Sanitary Gate and installed upon request on Sanitary Gate XL);
- A spraying system with an electric hydraulic pump housed inside a protective metal container with a safety lock.  
The spraying system includes:
  - a control unit;
  - an electric hydraulic pump to pressurise the system;
  - a withdrawal tub;
  - an auxiliary injection pump for ready-to-use sanitising blend and the relative injection filter;
  - a high-precision dosing unit and a water filter for the use of the concentrated sanitising product;
  - an external button for manual operation.

## POWER SUPPLY

The spraying system requires a connection to medium voltage mains (230V, 50Hz).

## METAL CONTAINER AND POSITIONING

The spraying system with an electric hydraulic pump is housed inside a protective metal container with a safety lock.

Inside there is space for two/three 25-litre canisters, depending on the format.

If the ambient temperature is between 5°C and 40°C, the metal container with the spraying system can be installed outdoors. Where possible, protect the container from sunlight to avoid overheating.

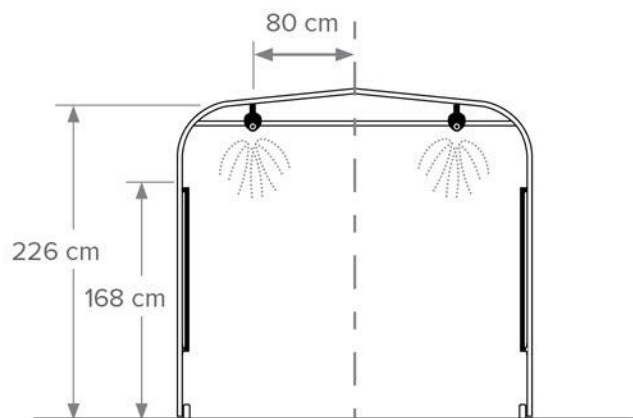
If the ambient temperature is below 5°C, the system cannot be used. Empty the pipes to avoid breakage due to freezing.

If the ambient temperature is above 40°C, the metal container must be placed in an environment that constantly keeps the temperature below this value.



## SPRAYING

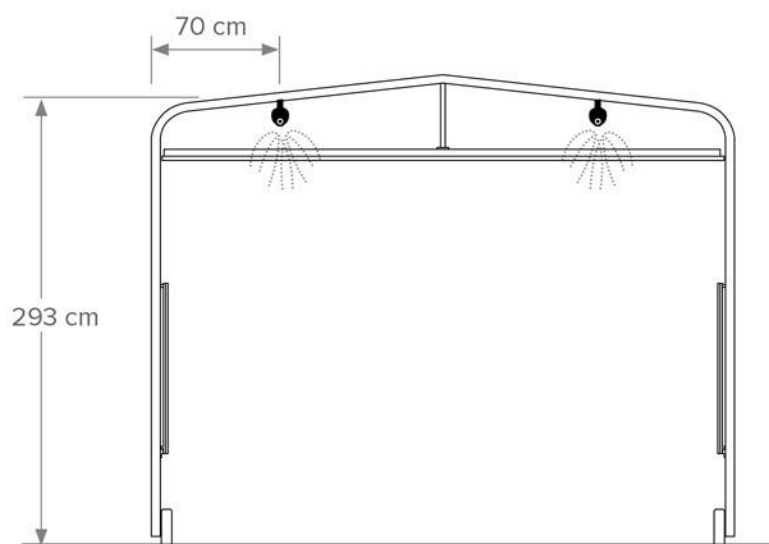
The size of the sprayed particles is determined by the ratio between the quantity of liquid and the air pressure, which can be programmed from the control panel.



**SANITARY GATE**  
SANITIZING TUNNEL



The standard Sanitary Gate AIR model has a single arch, at the entrance to the tunnel, supporting 2 self-cleaning spray guns with a flow regulator.



**SANITARY GATE XL**  
SANITIZING TUNNEL



The standard Sanitary Gate XL AIR model has a single arch, at the entrance to the tunnel, supporting 2 self-cleaning spray guns with a flow regulator.



## WARNING

If you want to change the system from a concentrated product to a ready-to-use blend or if you want to change the type of product, you must clean the system by spraying only water for at least 6 minutes.

## OPERATION

The system can operate either in manual mode, activated via an external button, or automatically, using the presence detector photocells. The type of operation can be selected by pressing the corresponding button on the control unit.



## MANUAL OPERATION

The spraying system can be activated by an external button. On the control panel you can set the dispensing time to 1, 2, or 3 minutes. When the button is pressed, the red traffic light lights up to indicate that the system is operating.

## AUTOMATIC OPERATION

In automatic mode, the entrances are scanned and regulated by the operation of the presence detector photocells and the traffic light.

When Sanitary Gate is ready to sanitise, the traffic light turns green. When the photocells detect a person entering the tunnel, the traffic light turns red and the substance is sprayed for a certain number of seconds. The spraying time can be set to 10, 20, or 30 seconds.

Every time the photocell detects a person, the timer is reset, and the traffic light stays red for 2 seconds. Then, the tunnel continues to spray the substance for as long as there are people passing through it.



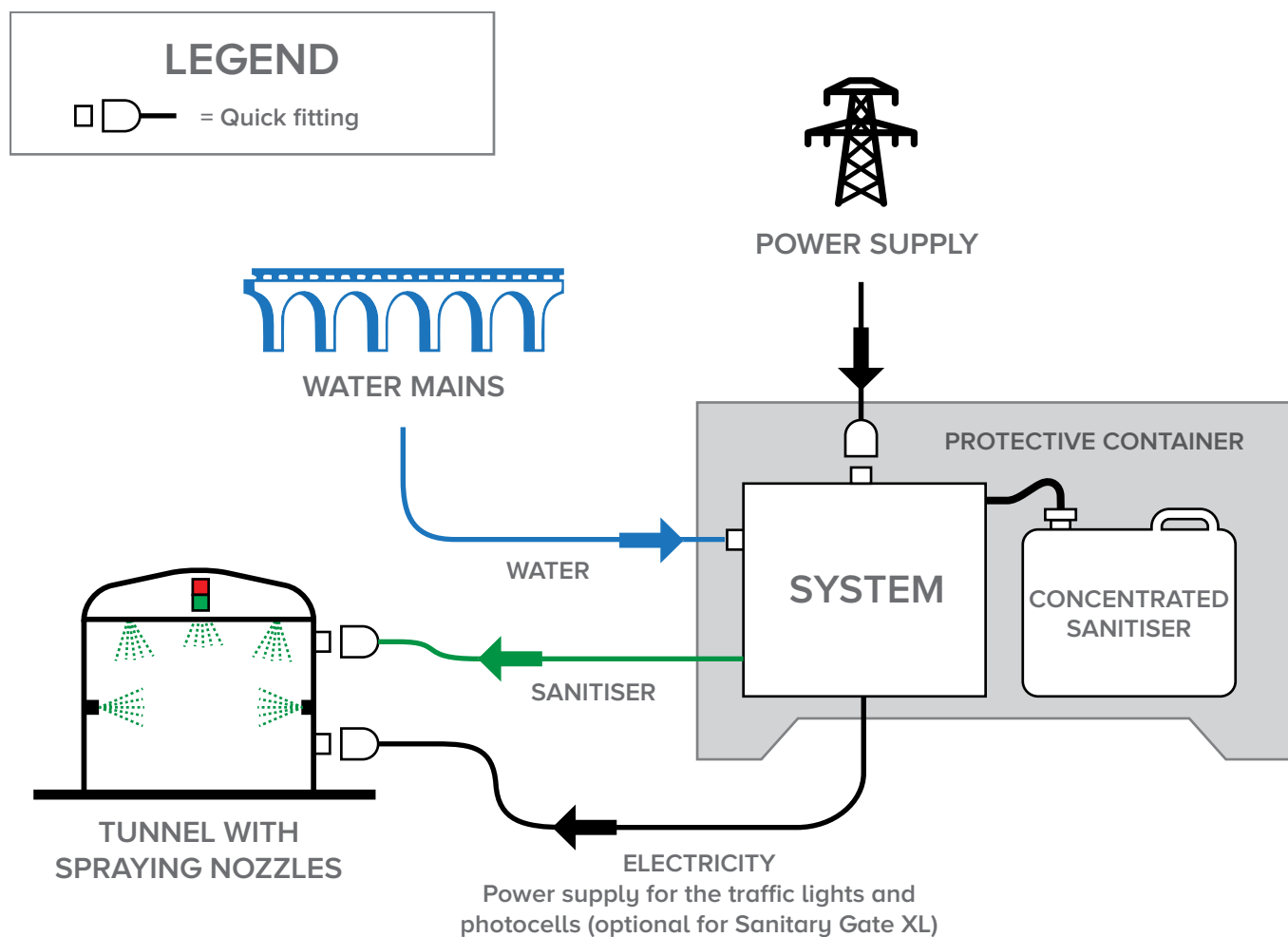


## A.1 - SPRAYING A CONCENTRATED SANITISER WITH THE HELP OF A HIGH-PRECISION DOSING UNIT

The sanitiser is diluted with water by the system itself, using a high-precision dosing unit. This type of system requires a connection to the water mains, which must supply running water at a pressure of at least 2 bar.

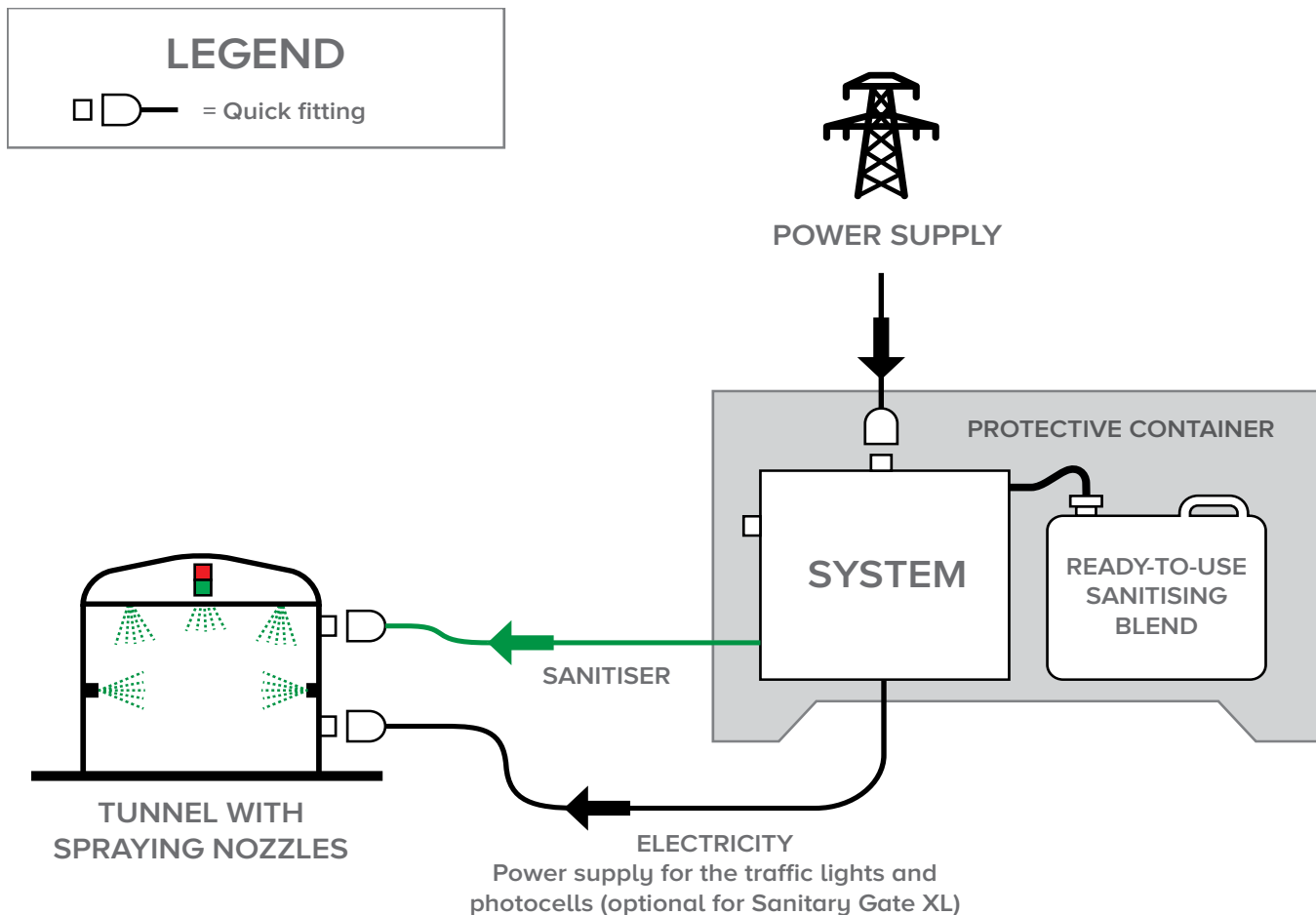
The dosing unit pours a pre-set amount of filtered running water and concentrated sanitising solution into the withdrawal tub. This solution is then sent to the spraying nozzles via the electric pump.

The percentage of concentration that can be set by the dosing unit ranges from 1% to 10%.



## A.2 - SPRAYING A READY-TO-USE BLEND

The auxiliary pump draws the ready-to-use solution from the canister and sends it directly to the withdrawal tub. The ready-to-use solution is then picked up and sent to the spraying nozzles via the electric pump.



When the withdrawal tub reaches the minimum level and the auxiliary injection pump in the tank no longer receives the product, the system shuts down after 5 seconds to safeguard the pump itself.

As for the main electric hydraulic pump that pressurises the system, when there is a lack of water in the tub, or a high-pressure delivery pipe (one of the pipes that deliver the product to the nozzles) is damaged, the pump shuts down to prevent breakage or damage after a pre-set time of 5 seconds.

## CERTIFICATION AND WARRANTY OF THE SYSTEM

The spraying system with an electric hydraulic pump has EMC (Electromagnetic Compatibility) and CE (European Certification) certification and is covered by a 2-year warranty.



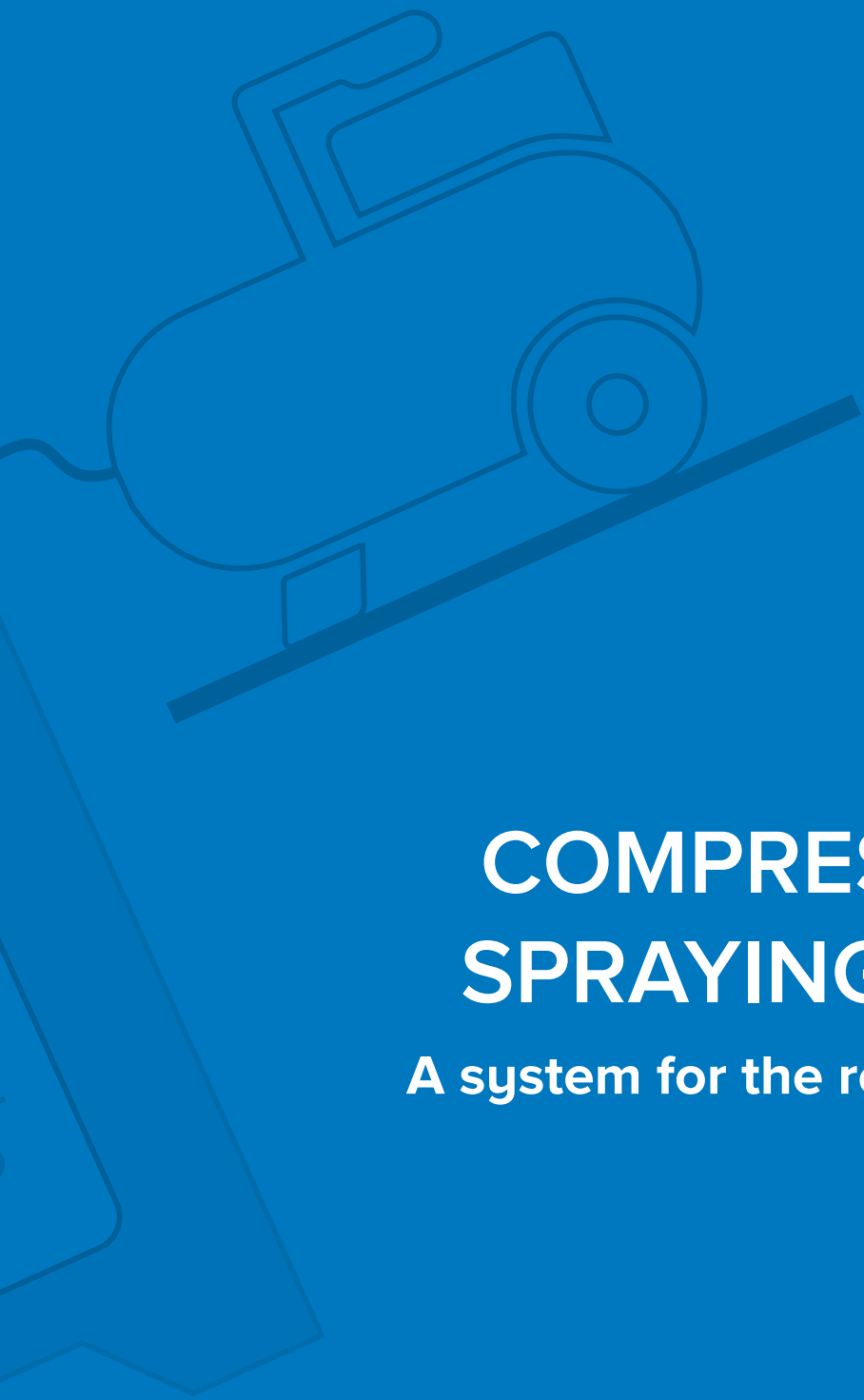


## FREQUENTLY ASKED QUESTIONS ABOUT THE SPRAYING SYSTEM WITH AN ELECTRIC HYDRAULIC PUMP

- 1 ..... How much sanitiser is consumed when using a hydraulic spraying system?**  
The standard Sanitary Gate model with 12 nozzles of 20 µm (micron) each, consumes about 42-45 litres of product in one hour of a continuous cycle, or about 1.2 cl per second at a pressure of 50-60 bar. Sanitary Gate XL, which has 24 nozzles, consumes exactly twice as much.
- 2 ..... What is the power consumption at full capacity?**  
The power consumption when running is 500 W with an inrush power of 1 kW for a work cycle.
- 3 ..... What is the power of the pump motor?**  
The motor power of the main pump that feeds the pressure to the nozzles is 370W = 0.5 hp (horsepower), while the power of the auxiliary pump for the diluted product is 37W = 0.05 hp (horsepower).
- 4 ..... Is it necessary to make any special adjustments to the power supply network to which the system is connected?**  
A simple upstream protection is required on the electrical network that supplies the system; a 6 Ampere magnetothermal block and 0.03 Ampere AC class differential block.
- 5 ..... Is it possible to stop the supply?**  
If you are operating in manual mode and want to stop dispensing quickly, you must switch the mode selector from manual to automatic, allowing the machine to stop the operation as defined by the automatic time.  
You can always stop the product dispensing immediately by switching the control unit off by pushing the on/off button on the control panel.
- 6 ..... What is the capacity of the sanitiser withdrawal tub?**  
The capacity of the withdrawal tub is approximately 3 litres.
- 7 ..... Does the system require any maintenance?**  
The pump seals need replacing after 2,000 hours of effective operation and maintenance related to the cleaning of the system and the nozzles must be carried out regularly.







# COMPRESSED AIR SPRAYING SYSTEM

A system for the ready-to-use blend

## COMPONENTS

This type of system consists of:

- **A retractable tunnel equipped with** self-cleaning spray guns with a flow regulator;
- **A compressed air spraying system housed inside a protective metal container with a safety lock.**

The spraying system includes:

- a control panel to regulate the nozzle flow;
- an injector pneumatic pump for picking the ready-to-use blend and an appropriate filter;
- an air filter;
- pneumatic timer;
- a pneumatic start button.

To operate the system, it is necessary to connect it to a compressor providing a pressure of at least 6 bar (not supplied by Giulio Barbieri S.r.l.).

## METAL CONTAINER AND POSITIONING

The compressed air spraying system is housed inside a protective metal container with a safety lock. Inside the metal container that protects the spraying system, there is space for two 25-litre canisters.

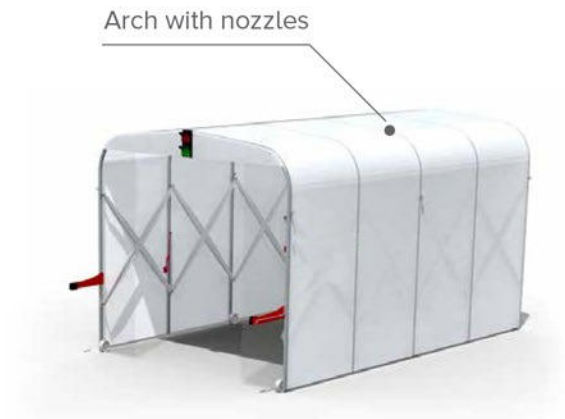
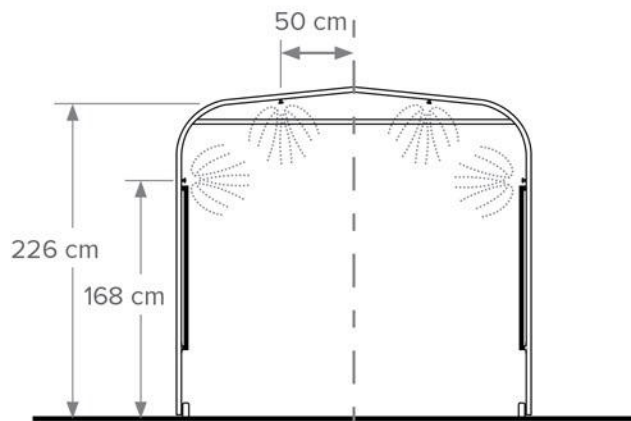
If the ambient temperature is above 5°C, the metal container with the spraying system can be installed outdoors. Where possible, protect the container from sunlight to avoid overheating.

If the ambient temperature is below 5°C, the system cannot be used. Empty the pipes to avoid breakage due to freezing.

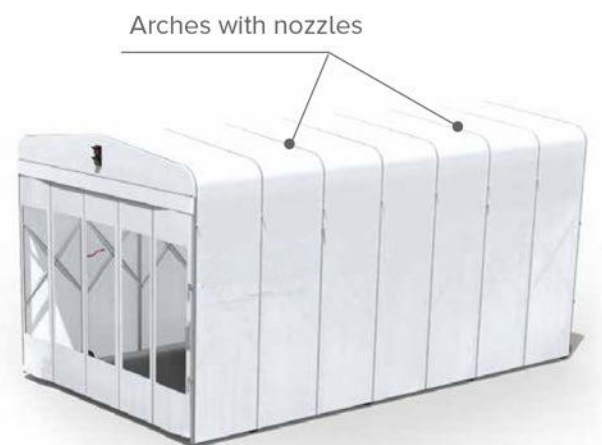
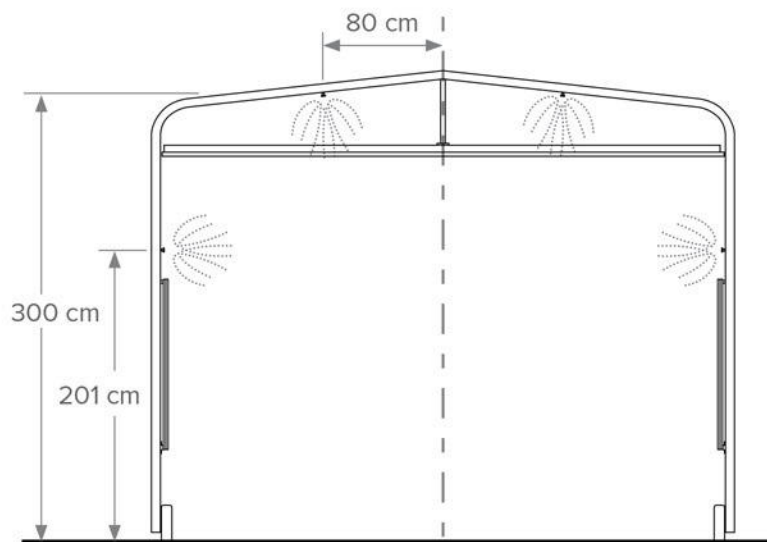


## SPRAYING

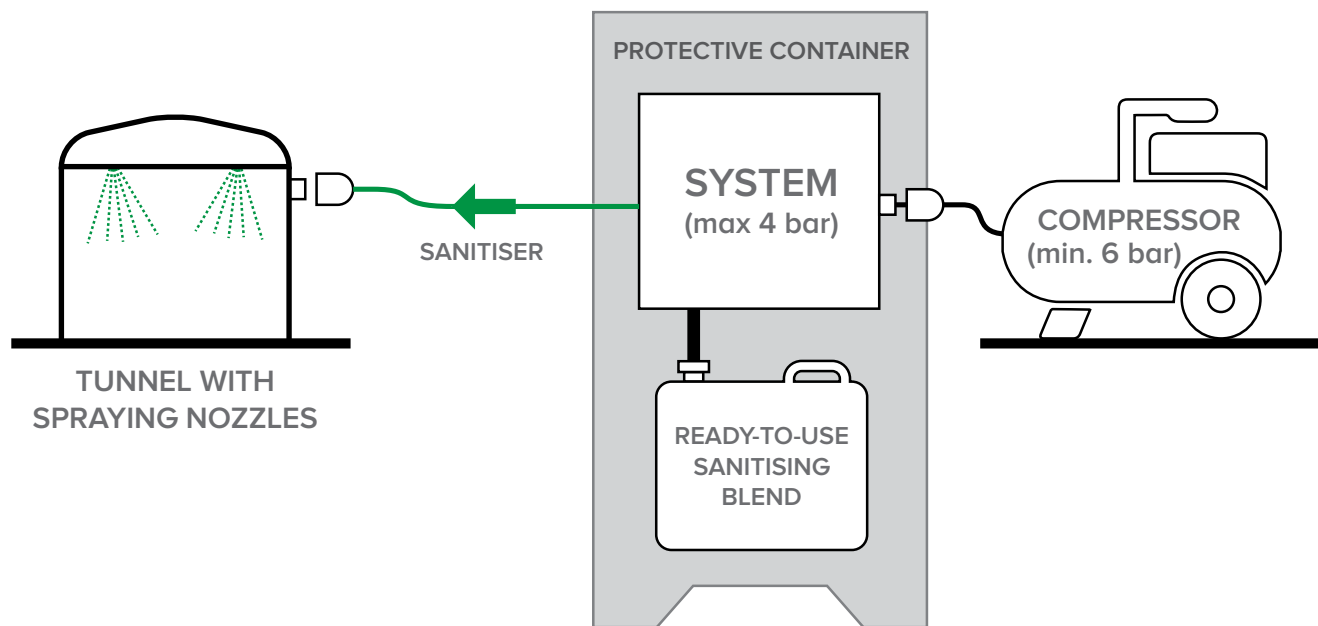
The size of the sprayed particles is determined by the nozzle hole, which has a diameter of 20 $\mu$ m (micron). Nozzles with other diameters are available upon request. The nozzles can be easily removed to facilitate the cleaning.



The standard Sanitary Gate model has a single arch, located in the centre of the tunnel, with 4 nozzle groups consisting of 3 nozzles each, for a total of 12 spraying nozzles.



The Sanitary Gate XL model has 2 arches, with 4 nozzle groups of 3 nozzles on each arch, for a total of 24 spraying nozzles.



## CERTIFICATION AND WARRANTY OF THE SYSTEM

The compressed air spraying system has CE certification (European Certification) and is covered by a 2-year warranty.





## FREQUENTLY ASKED QUESTIONS ABOUT THE COMPRESSED AIR SPRAYING SYSTEM

- 8..... **How many spray guns does the tunnel with the compressed air system have in total?**  
A single compressed air system can handle up to 2 adjustable spray guns.
- 9 ..... **Is it possible to stop the supply?**  
To immediately stop dispensing during a timed cycle, close the air supply tap.
- 10 ..... **What is the maximum pressure of the spraying system?**  
The system can operate at a maximum pressure of 4 bar.

# SANITARY GATE

## SANITIZING TUNNEL



MORE INFORMATION  
ON SANITARY GATE



**11..... How long does it take for the environment to become saturated?**

The environment is quickly saturated both when using Sanitary Gate with a spraying system with an electric hydraulic pump and the one with a compressed air system.

The standard Sanitary Gate model takes at least 10-20 seconds, while the XL model requires at least 3 or 4 minutes.

The sanitiser is sprayed evenly inside the Sanitary Gate, thus ensuring that even the most hidden spots are disinfected.

**12..... What type of sanitiser can be used?**

Any type of sanitiser available on the market can be used for the sanitisation of vehicles and goods.

For the sanitation of people, the type of sanitiser depends on the local regulations in force.

In order to comply with Italian regulations, we are currently developing a specialised product, which is currently in the certification phase.

## **RENTAL**

**13..... Is it possible to rent Sanitary Gate?**

TripleRoot does not offer any rental options for this product. We have contacts with companies who are willing to provide this type of service.

## **DELIVERY TIME**

**14..... What is the delivery time?**

Standard lead time is 3 weeks (shipping excluded).

Exact lead time for each order to be double checked upon confirmation.

International shipping service is available upon request.

## **INSPECTIONS**

**15..... Will inspections be carried out?**

Inspections are not necessary as we are able to provide personalised advice remotely.



info@rjmnanotech.com1002  
Gemini; Suite 224-R  
Houston TX 77058

888.RJM.NANO; 888.756.6266  
www.rjmnanotech.com