

POWERFUL, FLEXIBLE AND RELIABLE WASH ROBOT

FACTS ABOUT PROCLEANER X100





RELIABLE WASH ROBOT

Why a ProCleaner X100?

- It reduces the manual washing time by 70-80%
- It will be easier to keep a high cleaning standard, as employees only need to clean corners and hidden angles (less risk of diseases)
- You will keep the same high cleaning standard
- It will be easier to retain good employees
- It will be easier to attract new employees
- Due to faster cleaning the barns will be ready for use earlier
 - It will be possible to fatten the pigs 1-1½ day longer before slaughter, and thereby achieve higher earnings per pig.



BENEFITS AND LIMITATIONS

What limitations does ProCleaner X100 have:

- It requires access to a minimum of 25 liters of water per minute from a high-pressure pump. 35-40 liters per minute will increase cleaning performance significantly.
- It must have a corridor, because it uses the corridor walls to set the direction (side wheels of the robot).
- From the middle of the corridor there must be at least one meter into the first obstacle (water pipes, feed pipes, posts, etc.) at a sty depth about 4.5 mtr. (aprox. 20% clearance of total distance from the middle of the corridor to the endwall of the sty)
- Stable inventory should preferably have a height of no more than 125 cm. However, we can make a special model that can be up to 15 cm. higher (costs approximately 1.500 EUR extra)

The benefits of ProCleaner X100:

- It is built around a solid frame construction where all metal components are either galvanized or stainless steel.
- The entire construction is simple in its design, but contains advanced technical solutions which are well protected inside the machine.
- It is simple to operate via the robust terminal.
 - The simple operation is both first programming and forward daily use
- It is very service friendly - all components are easy to access
- The simple and robust construction ensures very high reliability, with subsequent low running costs
- Few wear parts.
- Especially in large stable systems, the customer will see the robot is very fast and efficient.



IT IS SO SIMPLE

How ProCleaner X100 works:

- Roll the robot into the stable, where it should be connected to 220V and external high-pressure pump.
- You need to roll around 1-2 meters of waterhose from the robot and hook it into the eye mounted on the door of the stable. (Helps to ensure that the stable door is kept closed during washing)
- Take arms from sideholder and insert them into the horizontal track. Sensors ensure that the robot cannot be started if the arms are incorrectly installed.
 - Arms can telescope to double length (the arms are available in lengths of 50, 60, 70, 80, 90, 100, 110 and 120 cm, and can then telescope to the double length)
- The arms telescope out to the desired length (so it does not hit feed pipes or other obstacles).
- On the terminal you select the program that is already made and saved previously. Programs can be saved with any name for better recognition.
- Then, just press start and the robot starts to move. When the robot has been running the program it stops.
 - With the SMS module you can be notified of any downtimes and when the robot is finished with a wash (SMS module is optional).
- Then disconnect from electricity and water, the arms are lowered into sideholders and the robot is easy to move into the next section with the supplied trolley (Watch the video).



PROCLEANER X100



SOAKING AND CLEANING

How ProCleaner X100 cleans:

- It is possible to select whether to soaking + cleaning or just in the process of cleaning.
 - When desire soaking both nozzles will wash(the volume of water is distributed to both nozzles).
 - It can be programmed to as many runs for soaking + desired time intervals between each run (up and down in the stable).
- When cleaning it runs with full water volume on one nozzle.
 - In “Wash1” the nozzle angle is 15 degrees in driving direction and the floor and the bottom of inventory is cleaned. When the end wall is reached, the robot can be programmed to wash the end wall.
 - When the robot runs back the nozzle turns so that it again wash in 15 degrees in the driving direction.
 - “Wash1” is then repeated in the opposite nozzle / side of the corridor.
 - In “Wash2” the nozzle angle is set to 45 degrees in the driving direction for cleaning inventory. When the end wall is reached, the robot can be programmed to wash the end wall.
 - When the robot runs back the nozzle turns so that it again wash in 45 degrees in the driving direction.
 - “Wash2” is then repeated in the opposite nozzle / side of the corridor.
- The stable is now ready for end manual cleaning.

FLEXIBLE CONTROL

Short about the control-unit in ProCleaner X100:

- The robot's "brain" is a PLC control that allows adjustments on a number of parameters, including:

Driving speed

- Can be programmed for different speeds in one program. Eg. faster when soaking and slower when cleaning.

The speed of the nozzles

- When a short distance from the nozzle tip to the item to be washed, you can choose to let the nozzle runs fast (due to great cleaning effect when the distance is short)
- When a far distance from the nozzle tip to the item (eg. At the bottom of the path), the speed is reduced when the water jet power is lower here and it can be the amount of water which provide the good cleaning effect.

The nozzle angle

- How far it should wash towards itself (the robot) and how far it must wash away from the robot (can be -55 degrees toward itself (eg. it also can wash the inventory in the corridor) and max. Horizontally (94 degrees) position into the sty).
- if it is needed to wash down vertically, or number of degrees in the direction of travel direction.
 - Used for washing of inventory and endwalls in the stable.

TECHNICAL SPECIFICATIONS

Product name	:	ProCleaner X100
Dimensions (LxWxH):		115 x 69* x 145 cm
Weight	:	285 kg
Power supply	:	230 V
Required amperage :		6 amp
Water consumption :		Min. 20 / max. 40 l per minute
Max. water pressure:		200 bar
Operating pressure :		140 bar (40 l water per minute)
Compressor	:	External

Wash time for 30 m pig house with 5 m pen depth
in both sides = 3-4 hours (it requires water volume of at least 30 l per minute).

*) Without side wheel



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