

Datasheet

Octopus Poultry Safe OPS

Sanitation



Models	OPS	OPS_Plus	OPS_Premium
Embedded modules	 <p>Versatile platform & Sanitation module (Spray directed to the litter)</p>	 <p>Versatile platform & Sanitation module (Spray directed to the litter)</p>	 <p>Versatile platform & Sanitation module (Spray directed to the litter)</p>
Options		 <p>Scarifier/rototiller</p>	 <p>Scarifier/rototiller</p>  <p>Sensor pack*</p> <p>(*): Systems for sensing ammonia, moisture and temperature levels at poultry height.</p>
Use	Poultry sheds/barns/houses, on a daily basis, in the presence of animals ⁽¹⁾		
Types of litter / beddings	Short-straw (strands not exceeding 2 cm long), wood-shavings, sawdust, rice husk, pellets...		
Applications	Sanitation	Sanitation + Scarification	Sanitation + Scarification
Targets	Ambient air	Litter and ambient air	Litter and ambient air
Localizations & Actions	<p>Sanitation module located beneath the protective skirt of the robot. Spraying of a dry mist (microparticles) consisting of sanitizers diffused homogeneously on and in the litter.</p> <p>Scarifier at the back of the robot beneath the protective skirt (no dust emissions). The robot turns, aerates and dries the litter daily and keeps it loose.</p>		
Treatment	Autonomous robot, no human intervention during operations.		
Sanitizers	Chemotyped essential oils (with or without adjuvant). The use of essential oils is recommended for improving Ambiental conditions, including the conditions to which animals are exposed, particularly in case of health risk or critical breeding. The essential oils dispersed at ground level will limit the proliferation of the ammonia-producing flora. They also act directly on the health of animals by their anti-infectious properties broad spectrum, antiseptic, respiratory function regulators and immunostimulants.		
Environment	The robot operates mechanically. It emits no molecules into the air. On the contrary, it reduces atmospheric emissions of carbon dioxide and ammonia. Ammonia is responsible for environmental eutrophication and acidification. The robot is powered by an electric battery. It is therefore possible to use renewable energy.		
Power supply	Battery (100A/h)		
Battery life	4 to 6 hours		
Recharge time and mode	3 hours, mains or docking station with integrated power supply and charging function (as an extra option)		
Dimensions (mm)	1120 X 1400 X 800		

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Misting of sanitizers

Animal welfare

Improvements of living conditions:

- . Plumage does not get soiled (wet and dirty)
- . Natural behaviors are possible (scratching, dust bathing, etc.)
- . Stimulation/distraction of the animals
- . Better ambient air smell ⁽²⁾
- . Better quality of litter (more give, lower moisture content, fewer insects, etc.)

Health

Improvements in health:

- . Reduction in footpad dermatitis, in keel and tarsus dermatitis
- . Fewer illnesses, a smaller entry door for pathogens
- . Reduction in breathing difficulties
- . Reduction in ascites ⁽³⁾
- . Reduction in the fermentation of uric acid into ammonia (NH₃) and carbon dioxide (CO₂)
- . More effective heat regulation (because the plumage is not soiled)
- . Reduction in the harmfulness of ammonia

BENEFITS

Productivity

Improvements in productivity:

- . Reduction in mortality
- . Reduction in the use of medical treatments
- . Reduction of penalties and seizures at slaughterhouse
- . Better growth, better feed conversion ratio (FCR)
- . Total traceability of the day-to-day operations
- . Reduced hardship at work

Safety

Improvements in safety:

- . No human intervention required during operations
- . Limitation of the exposure of operators to pathogens
- . Limitation of operators' exposure to ammonia and carbon dioxide

Compliance

Anticipation of the regulation:

- . Reduction in the concentration of ammonia in buildings:
 - Directive 2007/43/EC: < 20 ppm ammoniac, < 3000 ppm carbon dioxide
 - Directive EU NERCS 2030: 123 000 km² forest ecosystems saved from eutrophication ⁽⁴⁾ (a 35% reduction)
 - 19 000 km² of forest ecosystems protected from acidification (an 86% reduction)

(1) According to the regulations in force in the country, (2) The fermentation of uric acid results in the emission of gases: ammonia (NH₃) and carbon dioxide (CO₂), (3) Ascites: accumulation of liquid in the abdomen, (4) Eutrophication: excessive richness of nutrients in an ecosystem (caused by ammonia, for example).

Shed plan view – Sensor mapping (OSC_Premium robot)

