

# THE FIRST ROBOT OF ITS KIND IN THE WORLD

Use

OCTOPUS SCARIFIER is a robot intended to aerate litters in animal presence as well as monitor huge facilities such as poultry farms. It is mobile, intelligent, perfectly autonomous and modular. It recharges itself and can be operated 24/7. Thanks to its unique scarifier, it turns and aerates all types of substrates. It continuously maps indoor temperature, humidity, ammonia rates, sound and brightness levels. OCTOPUS SCARIFIER is equipped with advanced communication and navigation systems that facilitate optimal guidance and monitoring, on a par with autonomous vehicles. It is equipped with motors and wheels adapted to harsh environments. It is a concentrate of advanced technology in the service of health, safety, quality and productivity. A version for the decontamination of empty poultry production premises is also available (OCTOPUS POULTRY SAFE).

It decontaminates buildings by delivering liquid solutions (disinfectant and sanitizer) as aerosols (micro particles), until the volume of the targeted area is saturated.

**Application** 

Our Octopus Scarifier robot is suitable for all building types. It may be equipped with various modules designed to decontaminate buildings, deliver liquid medicines or vaccines. Octopus Scarifier is modular and versatile.

Benefits

Efficient treatment of litters and prevention of contamination in downtime period. Versatility and flexibility.

Cost-savings and performance enhancement.

Improvement of working & safety conditions, improvement of animal welfare.

Total traceability of the day-to-day operations.

# Key benefits

#### Performance

## Efficient treatment of litters and decontamination of buildings.

OCTOPUS SCARIFIER efficiently treats all types of bedding materials (straw, wood shaves, sawdust, beatenearth...). It can be operated in the presence of animals like the OCTOPUS POULTRY SAFE, a robot is intended to prevent and treat contaminations during downtime periods using broad-spectrum disinfectants and sanitizing solutions.

#### **Productivity**

# Reduction of bird mortality rates and improvement of animal welfare.

OCTOPUS SCARIFIER helps reducing mortality in poultry farms. It turns and ventilates litters to prevent the onset of aspergillosis, pododermatitis, hock and breast injuries that may kill birds or cause downgrading. The regular aeration of the litter inhibits the fermentation process in soil and dramatically reduces the level of ammonia in the barns. The robot also facilitates the penetration of the disinfectant into the litters. In addition, test results indicate that there is not a negative impact on the birds due to the operation of the robots when compared to their reactions to humans.

## Increase in yield.

The daily use of OCTOPUS SCARIFIER robot results in an average 10% weight gain (ADGs — Average Daily Gains) by reducing the level of ammonia in buildings. The robot makes it possible to produce better quality carcasses.



Increase in the ADG by dramatically reducing the level of ammonia

19.500 €

Reduction of the mortality rate

Reduction of the total bacteria load

Lower use of drugs

Lower risk of downgrading

Time saving and workforce optimization

AN ANNUAL GAIN ESTIMATED\* TO:

(\*) On the basis of a 2000m2 building with 6,5 rounds per year

#### Total traceability of the day-to-day operations.

OCTOPUS SCARIFIER is equipped with sensors, cameras and other systems that enable data to be collected, analyzed and stored. These systems provide you with valuable data to help you run your business better. Our robot communicates with you (WIFI, SMS...). It alerts you in real-time so that you can act quickly if problems arise. You can export data from the database and create statistics and/or establish comparative indicators...In the short term, our ambition is to constitute a platform for data exchange (Big Data) between users and with all players of the sector.

#### Improvement of working and safety conditions.

No operator intervention is required during the treatment process. Our robots help reduce the arduousness, and most importantly, our OCTOPUS POULTRY SAFE robot helps reduce employee exposure to airborne pathogens (viruses, bacteria, etc.).

#### Foresight

#### Staying a step ahead of the regulations.

Successive Health crisis encourage both professionals and health authorities to reconsider current practices and take measures to prevent and control contamination. The preventive arsenal is insufficient and inadequate in the event of a pandemic. Regulations and standards are fast moving and governments are determined to keep strengthening health security. In Octopus Robots we anticipate and develop solutions that pave the way.

# **Innovations**



## Modularity

Our Octopus robots are all fitted with a common versatile base. Our versatile base acts as a command post. It houses the intelligent systems from which the robots can be easily operated and monitored. It was designed so that you can easily interchange modules whatever your needs (decontamination of buildings, delivery of multi-usage solutions).





Model with scarifier unit (SCARIFIER)

Model with decontamination & scarifier units (POULTRY SAFE)



#### Intelligence

Our Octopus robots are inspired by the autonomous-vehicles technology. We have a similar concept. All of our robots are equipped with advanced communication and navigation systems, that facilitate optimal guidance and monitoring, as well as sensors, cameras. They do not need human assistance during operations.



## Mobility

Our Octopus robots are fully mobile and automated. They can be equipped with pneumatic tires for harsh environment or « Mecanum » wheels which allow transverse displacement in narrow spaces. Our robots have been designed for indoor or outdoor use.



#### Performance

Our sanitary robots far surpass competitor systems consisting of static units or fixed installations, even those allegedly mobile. Our robots travel and homogeneously spray disinfectant all over the surfaces. Our robots can treat extensive buildings while moving away from constraints such as temperature and humidity gradients, disturbance of air flow that may have a negative impact. Disinfectant solution is always close to the targeted areas. See our antimicrobial activity report.



# Communication & Traceability

Wi-Fi interface provides real-time monitoring of various operating parameters of the system. Settings can be remotely controlled and operation log can be downloaded.



#### Autonomy

Our Octopus robots move and power themselves. They are powered using long-life battery. The automatic OCTO-Ri-Charger base makes our robots running 24/7 as they automatically geolocalize and return to their charging base to recharge the battery and/or refill their tank with active substances when needed (No long/costly down-time. No service disruption).



#### Safety

Our Octopus robots provide a lot of performance for a maximum of safety (no human intervention required). Our robots can be operated by a wide range of operators with no qualifications whatsoever.

# **Assistance**

#### Warranty

We offer a two-year standard warranty on all of our robots. We also offer a unique extended warranty directly from us providing up to 3 years' additional peace of mind. It is designed to take over once your warranty expires and will protect you against the cost of call-outs, labor and parts.

And if one of our trained Service Technicians can't repair your appliance, you could even receive a brand-new replacement. You'll pay nothing extra for approved repairs by our Service Technicians, using only our spare parts.

#### Service



For your added convenience, we provide a suite of free and paying services. Do not hesitate to consult us.

On-site installation and setup
User training and technical training
Software support
Technical support
Hardware support
Preventive and curative maintenance
Warranty extension
Decontamination service

## Origin

Octopus robots is a truly Agtech/Agbot company.

Our are designed and manufactured in France (Cholet - 49). In Octopus Robots, we assemble a multidisciplinary team of passionate engineers specializing in high-tech and robotics. We use the most advanced technologies while following rigorous quality control standards. We have a Scientific Committee that includes experts in human and animal health. We work with a limited number of world-class suppliers who provide us with the benefit of their vast experience and expertise.

We benefit from the expertise of our leader, particularly in terms of biodecontamination. He formerly developed an airborne disinfection system intended for Infection Control Officers in the healthcare sector. This system is now being sold around the world.

They talk about us ——

http://octopusrobots.com/presse/



www.avianmanagement.com.au/octopus-xo