# Moving Floor Concept for Pigs

A Sustainable Solution for Modern Pig Farming

OVING FLOOR CONCEPT

### Introduction

Did List want it.

The Moving Floor concept revolutionizes pig farming by addressing key environmental and health challenges while enhancing operational efficiency.

This innovative system offers a fully automated cleaning solution that significantly reduces emissions, improves animal welfare, lowers construction costs, and eliminates the need for water in daily cleaning.

By focusing on sustainability and efficiency, Moving Floor provides a future-proof solution for pig farmers seeking to modernize their operations.



# Reducing Emissions for a Cleaner Environment

One of the most significant environmental benefits of the Moving Floor system is the drastic reduction in ammonia emissions.

Traditional pig barns can have ammonia levels ranging from 7 to 14 ppm (parts per million), which can severely affect air quality for both animals and humans. The Moving Floor system cuts ammonia emissions by 85%, reducing levels to as low as 1 to 4 ppm. By scraping manure off the floor within hours of excretion, the system prevents the peak ammonia release that typically occurs 4-6 hours after manure is produced.

This timely removal contributes to a healthier barn environment and minimizes the environmental impact of pig farming.

Furthermore, the system's ability to produce fresh and dry manure makes it ideal for biogas production and composting, supporting circular farming practices and reducing the carbon footprint.

#### Healthier Animals, Healthier Farm

Healthier animals lead to better productivity, and the Moving Floor system ensures pigs thrive in cleaner, more sanitary conditions. By automating the cleaning process, the system reduces the spread of diseases, cutting the need for antibiotics.

Cleaner environments mean pigs are less exposed to harmful bacteria and respiratory issues caused by high ammonia levels.



Healthier pigs are not only more profitable, but they also help improve the overall sustainability of the farm by reducing the use of antibiotics.

Moving Floor's automated cleaning process ensures that the barn remains consistently clean, without the need for labor-intensive manual cleaning.

### **Cost-Effective and Simplified Contruction**

Unlike conventional pig barns that rely on slattedfloors, the Moving Floor system simplifies the construction process, allowing for smart renovations.

The system only requires a flat floor surface, eliminating the need for complex groundworks and reducing the amount of concrete needed during construction.

Whether installing the system in a new barn or retrofitting an existing one, Moving Floor offers flexibility and cost efficiency.

The simplicity of the system, being fully modular, makes it easier to expand or modify barn designs as needed.

Farmers can scale their operations with less capital expenditure while still benefiting from the advanced cleaning technology that Moving Floor provides.



Before renovation



After renovation

# **Water-Free Operation** for Sustainability

The Moving Floor system completely eliminates the need for water in daily cleaning operations, making it an ideal solution for farms looking to reduce their water consumption and promote sustainable practices.

This water-free system not only conserves a valuable resource but also improves manure handling by keeping it dry.

production.

Dry manure is easier to transport, less costly to manage, and being fresh makes it more efficient for biogas

### Key features include:

### How it works: The Technology Behind Moving Floor

The Moving Floor system is powered by **compressed air** and operates through a **rotating conveyor** that scrapes manure off the floor at set intervals.

The floor moves slowly and stops when pigs are lying down, ensuring animal safety.

The manure is removed before harmful gases like ammonia can build up, providing a cleaner environment for both pigs and farm workers.







Manure being scraped off the floor.



#### Ammonia Reduction:

Ammonia levels are

cut by 85%, maintaining clean air and reducing health risks for pigs. Moving Floor is designed to improve **animal welfare** by providing pigs with a **clean**, **dry**, **and comfortable environment**.







Animal Welfare:



### Modular Design:

The system is scalable and can be adapted for various barn sizes, from small piglet pens to larger fattening units.



### **Financial and Operational Advantages**

### Payback Period:

### Flexible Financing:

Farmers adopting the Moving Floor system typically experience a shorter payback period compared to conventional systems, with savings generated through reduced operational costs and improved pig health.

classified as **movable** property, allowing farmers to finance it through leasing or installment plans.

Moving Floor equipment is

This flexibility makes it easier for farms of all sizes to invest in advanced technology without large upfront costs.

#### Labor Savings:

The fully automated cleaning process reduces the need for manual labor, freeing up resources for other farm operations.

The system can even automate the distribution of bedding or rooting materials, further reducing labor demands.





# The Future of **Pig Farming**

Moving Floor is setting a new industry standard for pig farming by addressing key challenges such as;

- -emissions
- -animal health
- -water usage
- -construction costs

By automating the cleaning process and reducing environmental impact, the system helps farmers create more sustainable, profitable, and efficient operations.

Whether you are retrofitting an existing barn or building a new facility, Moving Floor offers a flexible and innovative solution that positions your farm for future success.

