

# SPACE KIT SP01

**SPACE Systems** has spent a decade optimizing a series of innovations reducing the environmental impact of animal production.

Today **SPACE Systems** offer solutions for retrofit and new build projects to owners who want to reduce the impact on the environment.

**Interested?**

Get in touch.

Call Jørgen Berth: +45 4056 1510

E-mail [sales@spacesystems.dk](mailto:sales@spacesystems.dk)

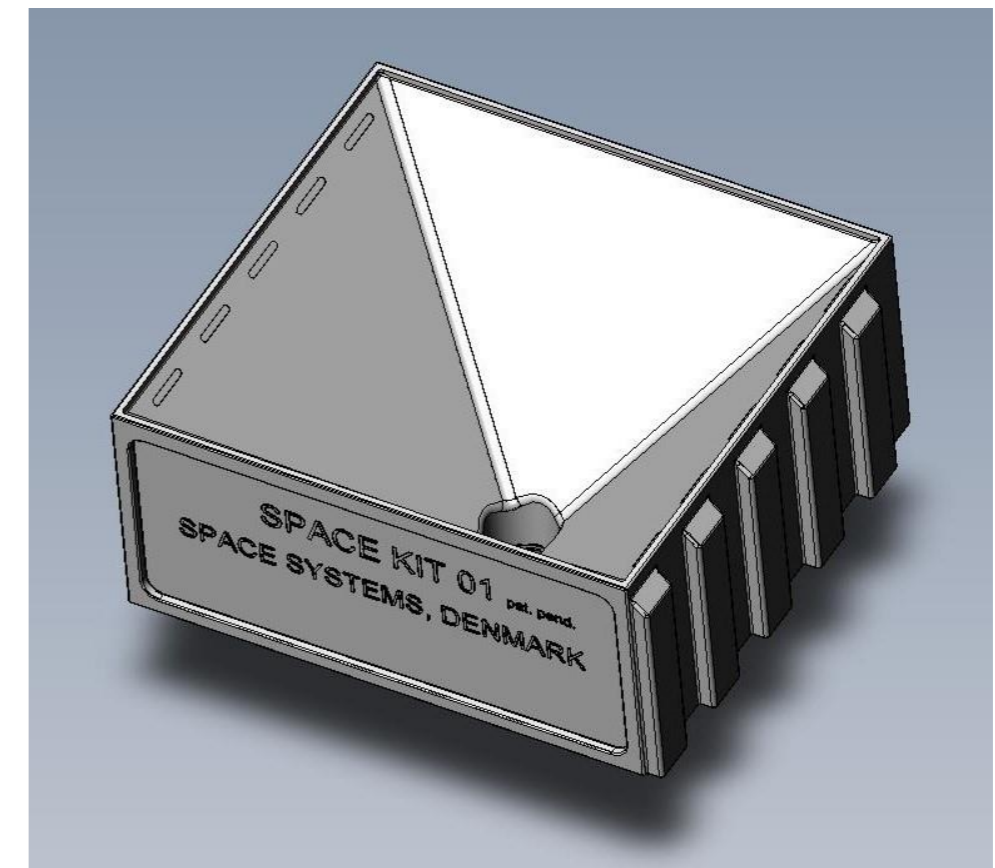
**SPACE Systems**  
Innovative farming

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## Slurry collection with floor level air extraction for retrofit and new build projects

Environment friendly animal production with high welfare,  
less medication and optimal economy



**SPACE KIT SP01:** Images from model stables in the making 1. generation with funnel cassette

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## Making innovation matter

Jørgen Berth, the founder of **SPACE Systems**, and his 'Innovation Farm Project' won the Danish Environment Technology Price in 2007 for developing new improved solutions to finisher production from 7kg.

The vision: Profitable production with absolute minimal environmental impact. At much lower levels than the legislated limits and permissions.

Since then, the project has been realised in full scale production of finishers that has been up and running since 2008.

In 2016 **SPACE Systems** headed a consortium of tech leading companies which the Ministry of Environment and Food of Denmark granted with the honour and funds to realise the "Moon Pig" Project. Now it is time to share the breakthroughs.

## SPACE Systems in short

Application of **SPACE KIT SP01** cassette system for collection of slurry. The design reduces the surface of slurry.

The cassette system incorporates floor level air extraction that can be directly connected with Munters MAC air cleaner which in total reduce  $\text{NH}_3$  emission by more than 80%.

Acidification of slurry converting  $\text{NH}_3$  to  $\text{NH}_4$  lower the pH and stabilise the ammonia preventing vaporisation – making the slurry easier accessible for plants.

Reduced use of antibiotics by different systems for feeding with dry and liquid feed incorporating fermentation of high-protein marine-based raw materials.

Online documentation in IKT-platform.

Fighting MRSA via with a new patented non-harmful disinfectant by fog application in stables with live stock.

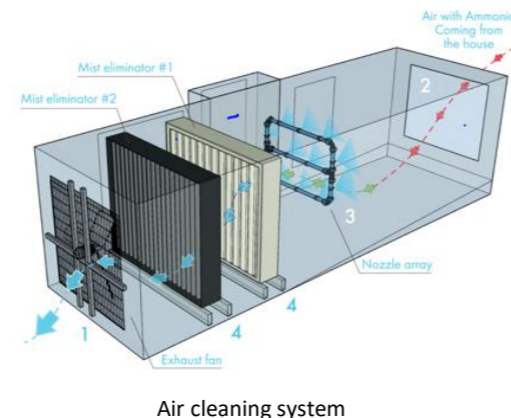


Winner: Danish Environment Technology Price 2007



Værum Vestergaard where innovation started

SPACE is an abbreviation for Slaughter Pigs in Ammonia Controlled Environment. However SPACE Systems is applicable in other kinds of animal production.



Air cleaning system



**SPACE KIT** 1. generation funnel cassette

## SPACE KIT SP01 benefits

Replace traditional high emission concrete slurry channels with an integrated cassette system, that works like LEGO bricks, for retrofit or new construction projects and enjoy the benefits **SPACE Systems** offer.

- Rotational moulded HDPE cassette with built-in environment diaphragm - no concrete channel below cassette
- Connect with drainage piping in same way as traditional systems
- Flexible design. 2/3 solid floor or 1/3 solid floor - one or two set of funnels
- Small slurry surface and built-in ventilation channel for floor air extraction – reduce ammonia emissions with more than 80% when combined with Munters MAC chemical air cleaning system
- Over 50% odor reduction when combined with biological air cleaning and/or cooling
- No slurry build up. Easy to clean material with low adhesion properties
- 10 years of operation
- Competitive price

## Winner: Moon Pig Project

The purpose of the Danish Government funded Moon Pig project is to demonstrate that a combination of pioneering, new and existing technologies can be applied when building or renovating an existing finisher housing with **SPACE Systems**.

The objectives are to document that increased animal welfare and reduced environmental impact can be combined sustainable and profitable operations.

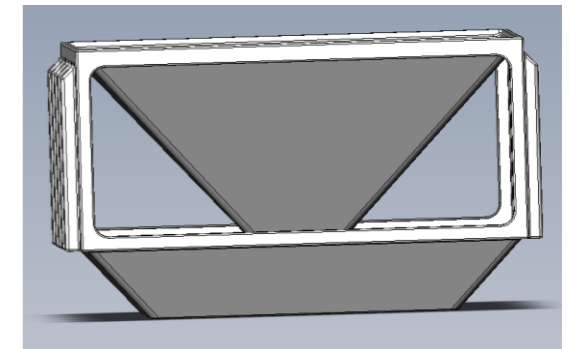
Focus areas are lower  $\text{NH}_3$  emissions, improved animal welfare, less medication, fighting MRSA and online documentation.

## 12.000 finishers on a 600 finisher permit

Today's permit is based on an "old" permit for max. annual ammonia emission from a production of 600 finisher situated in an EU environmental protected area.

**SPACE Systems** has succeeded obtaining approval for annual productions of 12.000 Finishers - with emission still below "old" limits.

Apply **SPACE Systems** and remove the barrier of emission and grow your business significantly.



**SPACE KIT SP01** cassette



**Ministry of Environment and Food of Denmark**  
The Danish  
Agricultural Agency

