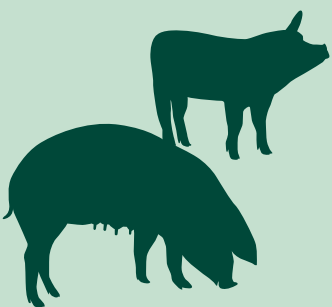




PIG COUGH MONITOR

SOUND ANALYSIS FOR
AUTOMATIC HEALTH MONITORING

- to identify respiratory disease early
- to reduce the use of antibiotics



PIG COUGH MONITOR

The Pig Cough Monitor (PCM) continuously monitors the occurrence of coughing in a compartment of pigs, by automated analysis of sounds recorded in the pig house. With this innovation, a continuous observation of the respiratory health status of pigs becomes possible, diseases can be detected earlier and the use of antibiotics can be reduced.



Sound Analysis

The system consists of a control with analysing software and two microphones installed at several locations to record sound. This sound is then filtered initially to distinguish general pig sounds, then separating these from coughing. This information is graphically presented to the end-user and alarms are raised when thresholds are exceeded. From there the Farmer can determine the acceptable level of coughing against a pre-set norm.

Early warning

With this continuous and automatic observation, respiratory disease can be identified in an early stage. Improved and faster observation of the animals reduces the use of antibiotics, for shorter periods to less animals. A reduction in the use of antibiotics is healthier for both pigs and humans. Healthy animals will perform better, leading to more consistent growth, end weight and greater profit.

Welfare monitor

The sound analysis is part of a larger system that is still under development, using new sensor technology such as cameras and microphones to measure animal welfare in an objective way. Information from these

measurements combined with the data from the climate and feed controllers generates an objective assessment of the actual welfare of the animals by means of an automatic welfare monitor.

Management tool for veterinarians

Apart from the obvious financial benefit the

system also gives Veterinarians the ability to meet the challenge of continuously providing more detailed information about current threats. Not only can they consult in a quick and economic way, they can also compare the results of different farms and manage the threat of a wider spread infection within their region.

