SKIOLD ESF ELECTRONIC SOW FEEDING

Top hygienic feed trough
Efficient control of sow's feed intake (lack of feed consumption triggers an alarm)
Controlled feeding of every single sow
Automatic dosing of vitamins and minerals
User-friendly training programme
No waste of feed
Adjustable feedstation from 42 to 47 cm with easy entrance
The Feed Station

SKIOLD has developed a station that is adjustable width wise, enabling the farmer to adapt the station to the sows of each farm. And first of all the station is completely open so that you can see the whole sow in the feed station - and look down into the feeding trough when the sow is eating. This gives optimum conditions for those taking care of the sows.

Inside the feed station there are no sharp edges and angles, enabling the sow to very easily get through the feed station without injuries. At the same time the trough is designed in a way that conforms to the natural eating behaviour of the sows.

The feed station is built of sturdy steel sheeting, which has been heat galvanized for optimal durability. The station features compressed air-controlled rear gates and access to the feed trough controlled by compressed air. With this design, SKIOLD has created the simplest and most reliable feed station available on the market today.

Unique Rinsing System Eases Cleaning

A built in rinsing system automatically rinses the trough after feeding. This prevents accumulation of old feed, meaning that the system delivers fresh feed to each sow every time.

Entry Gate

A new and very sturdy entry gate system ensures maximum durability and makes the operation of the station particularly reliable. The entry gate is controlled by compressed air and opens automatically when the station is empty, thus making it much easier to train new animals. A photoelectric cell is used to close the gates automatically and gently behind the sow, and the gates remain closed until the sow has eaten its ration or has left the station.

Feed Curves and Other Control Functions

• It is possible to enter up to nine different feed curves into the feed computer for the automatic regulation of the feed quantities, mix, etc..

• Likewise, it is also possible to adjust the volume of water allocated, in relation to the quantity of dry feed.

• There is also an option to use the same station to distribute two different feed mixes (Phase feeding).

• Furthermore, the system can even be used to distribute medication. When a sow that has been entered into the system as requiring medication enters the station, the predefined amount of minerals and vitamins is dispensed using a small auger.

• The system can also print a variety of detailed status lists.

Feed Trough

The feed trough is made of stainless steel. The gate is controlled by compressed air and ensures that only sows that have not eaten their entire ration have access to the trough. The gate also closes automatically when the sow has eaten its total daily ration.

Separation

If you wish to separate particular sows from the rest of the herd, for example sows that are to be moved to the farrowing pens, an air-controlled gate takes care of the procedure. This gate automatically leads the sows in question into a separation pen instead of returning them to the rest of the herd.

Colour Marking

If you do not have a separation pen, or if you wish to mark certain sows for vaccination, etc., a colour spray system is available for installation above the eating area. The spray system can operate with up to three different colours.

Boar Detector

The boar detector helps you to find sows that have to return to service. Via a visiting index you can define an alarm list that will be visible on the screen showing the sows that have visited the boar, and are included in the index, calculated by the computer.
The ESF computer is a robust, industrial computer made in Denmark that can withstand the tough conditions in the housings, which are often not insulated. The computer contains all the facilities to be expected of a modern feeding computer. Various Windows-based programs for remote control and Management are available.

**Wireless Scanner, Hand-held Terminal & PC communication**

With the hand-held terminal, you can take all the data about your sows with you wherever you go. A newly developed wireless scanner makes it possible to read the sows’ ear tags, providing you with instant access to all relevant data. The hand-held terminal features a plug connection, which can be used for recharging the terminal or transferring new data to both the feeding computer and the management program in your PC.

SKIOLD has developed software to the PDA/hand-held terminal with Windows user interface and touch-screen display that makes it possible to change/check all data on the entire herd in the housing. Combined with the management system the farmer/user have all opportunities to manage the animal’s welfare via the PDA. Together with the PDA the wireless ear tag scanner, which is based on Blue tooth technology, offers numerous administrative possibilities directly from the housing where the activities take place. The combination of newly developed hardware and software constitutes the perfect tool for administration of ESF as well as liquid feeding.

### ESF COMPUTER - CAPACITY

<table>
<thead>
<tr>
<th>Feature</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of stations</td>
<td>60</td>
</tr>
<tr>
<td>Connection points PC and hand-held terminal</td>
<td>yes</td>
</tr>
<tr>
<td>Recipes per station dry or liquid</td>
<td>2</td>
</tr>
<tr>
<td>Medication dispensers</td>
<td>option</td>
</tr>
<tr>
<td>Number of feed curves</td>
<td>9</td>
</tr>
<tr>
<td>Separation by gate</td>
<td>option</td>
</tr>
<tr>
<td>Separation by colour</td>
<td>up to 3</td>
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<tr>
<td>Alarm</td>
<td>option</td>
</tr>
<tr>
<td>Integration with management system</td>
<td>yes</td>
</tr>
<tr>
<td>Max capacity of ear-tags</td>
<td>6000</td>
</tr>
</tbody>
</table>

The computer
When it comes to designing and building of ESF stables, SKIOLD has more than 30 years experience. For more than 30 years SKIOLD has developed feeding equipment for pig production. In collaboration with Danish pig producers and research institutes SKIOLD has specialized in electronic sow feeding among other things. Using this vast base of experience and knowledge SKIOLD has designed and developed a completely new electronic sow feed station (ESF), displaying a great potential for improved feed efficiency, animal welfare and user interface.

Satisfied customers and sows...

DANISH CUSTOMER SAYS:

“I have had en ESF from SKIOLD for 11 years. The first four stations were in a stable built in 1998. In 2007 we built a new stable and bought 12 completely new stations”, Mads Niær Kristensen, producing UK-pigs, says.

“If you don’t mind technology, the ESF system is very easy to handle. I am very satisfied with it, and we have had many employees who like the system. The feed station from SKIOLD is a very good station. That is why we chose it again in 2007”, Mads Niær Kristensen says.

“NO PROBLEMS” FROM IRELAND

John Horan has 1,100 sows on his farm in Ireland. Three years ago he converted to group housed sows and bought 13 ESF stations from SKIOLD.

“We have two large groups. One of 400 sows sharing five stations and another of 230 sows sharing three stations. We also have three stations for gilts and two for trainee gilts,” John Horan says. He finds the stations very easy to operate and does not spend a lot of time training the young sows.

“We use the built in trainee programme and put in the gilts on one site and then they eat and come out on the other site," John Horan says. There are between 65 and 80 sows per station in John Horan’s buildings. They get their daily ration all at once. Water is adjusted once for all in each station.

“Everything runs smoothly. The sows are in much better condition and seem to be better in comparison with the sows in confined stalls,” he says.

It is quite easy to manage the ESF system. We have very little maintenance cost per year on the stations from SKIOLD,” he says.

If John Horan is going to build a new building for group housed sows, he will definitely choose the ESF stations from SKIOLD A/S again.