



Electronic Sow Feeding



AP and Schauer Partner

Combining over 30 years of expertise in electronic sow feeding technology with industry leading service and support. Let AP and Schauer partner with you to provide sow housing solutions that maximize animal welfare and performance.



Change is not always easy. AP has a team dedicated to electronic sow feeding to provide technical support and assist you with the management transition from crates to pen gestation by training managers and employees to get the most out of the Compident electronic sow feeding system. ESF can be much more than a way to feed sows. It offers a variety of new management options that target vaccination, heat detection, reproductive efficiency, nutritional supplementation, and animal movement.



Schauer Agrotechnics of Prambachkirchen, Austria has over 30 years of experience in the engineering, manufacturing and support of electronic feeding systems for gestating sows. Schauer is the world leader in ESF with thousands of units currently in use around the globe. Schauer's "Compident" line of electronic sow feeding systems provides software and hardware systems refined by experience to provide reliability and performance.



More than 30 years of experience and unparalleled performance make Schauer a market leader. Your choice of the Compident feeding and management system guarantees you the best possible solution to pen gestation.

COMPIDENT

Electronic Sow Feeding System

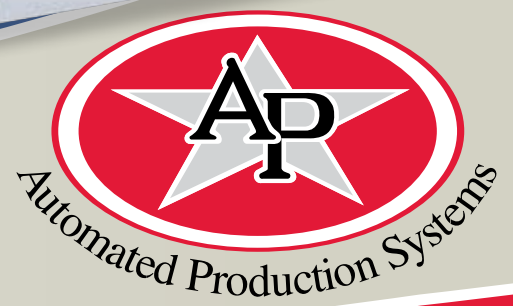
Electronic sow feeding is the only alternative to gestation crates that provides true individual animal nutrition. The electronic identification of sows with RFID tags also opens the door to a host of other computer controlled solutions to the management of individual animals. This includes vaccination, heat detection, ultrasonic pregnancy exam and top dressing of nutritional supplements.

- Schauer is the world's leading manufacturer of ESF systems
- Thousands of units currently in use around the world
- Expertise in system design and technical support
- New "TOPO" user friendly computer interface system
- Hand held units enable paperless barn management
- Feeds up to 80 sows per Compident ESF unit
- Straight ahead exit and retractable feed bowl maximizes animal throughput

Compident feeding stations are robust and reliable thanks to more than 30 years of experience and dedication to continuous improvement.



Embrace the Future!



TOPO: Compident Sow Feeding Software and Hardware



TOPO Unit



FCON



RFID (Radio Frequency Identification) Tag



The TOPO system combined with Pig Manager II mobile units can enable "paperless barn management".

New user-friendly feeding software.

The Schauer name is synonymous with functional feeding computers that feature outstanding user-friendliness and convenience. The latest introduction is TOPO, based on Windows CE programming. This computer program enjoys unsurpassed customer satisfaction through its straightforward and intuitive operation. The graphics showing all the program features are displayed clearly, giving a perfect overview of the feed strategy and the current status of the feeding at all times. To call up details all you have to do is click on the information you require. External data backup is easier than ever before with the use of a USB stick. As with previous models, a backup battery ensures that data is stored reliably in the event of a power outage. The key data and input menus link up to Pig Manager Mobile, allowing the possibility of a "paperless" sow and feeding management system.

Functional Controller (FCON VI)

- Manual control of all functions of feeding station
- Local adjustment of station feeding parameters, such as calibration, timings, and activation of sensors
- Current event status of station
- Transponder test mode
- Diagnostic tool

Pig Manager Mobile II

- Management software that runs on either commercially available PDAs or on a specialized heavy duty hand held device with RFID reader
- Interfaces with Compident controlling software
- Compatible with other Applications based on ISOagriNET



Hand Held Unit



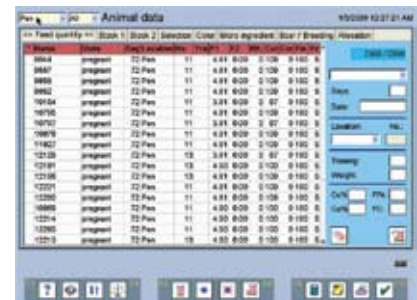
By the minute - Watch the activity of individual feed stations in real time.



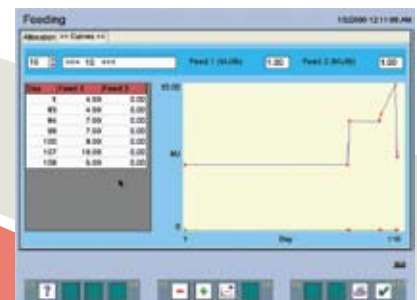
By the hour - Follow the feeding progress of different groups in the herd.



By the day - Monitor daily uses of each feed station.



Spreadsheet-like data base for easy access to any information on any sow.



Graphical interface for convenient generation of a variety of feed curves.

COMPIDENT

Feeding Station Functionality

Compident Feeding Station

- Feed station recognizes sow through RFID tag
- Trough extends if sow has not consumed daily allowance
- Feed is mixed with water to improve palatability and allow sows to eat more efficiently
- Micro-doser allows for computer control supplementation of diets
- Sow can enter station even after she has eaten; therefore no negative reinforcement is displayed
- Station can be programmed to sort animals based on production criteria
- Up to three different color marking options available
- Extremely durable feeder with years of proven reliability
- Due to feeder design up to 80 sows can be fed per day per feeder
- Exit chutes allow sows to re-enter the loafing area when ready



Pneumatic Feed Dispenser



Swivel Trough



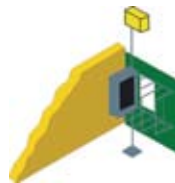
Swivel Trough Feeding Position

Compident Training Station

- Specialized feeder built to the dimensions of a gilt
- Training mode accommodates learning of naïve animals
- Available for training of replacement gilts
- Compident trainee allows developing gilts to familiarize themselves with the basics of ESF

Heat Detection

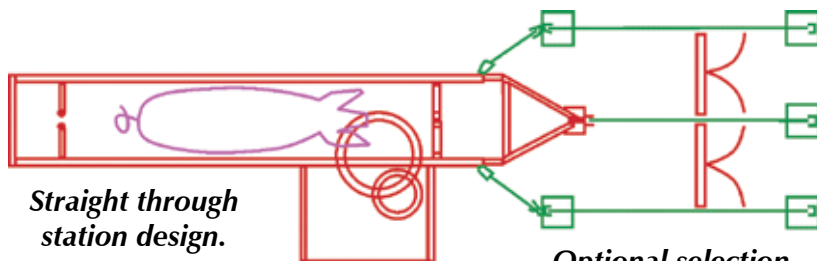
- Boar station records females interest in the boar
- Aids in identifying females in estrus



Available Heat Detection Unit



Color Coding (2 per feed station)



Straight through station design.

Optional selection unit with double exit.

Embrace the Future!



Barn Design and Animal Flow

The AP/Schauer team has experience with a variety of pen housing options from total slatted confinement barns, to partially slatted sow barns, to deep bedded barns to extensive pasture-based systems. Our ESF system is totally flexible in its implementation and readily applicable to retrofitting existing facilities. Our expert team will provide concept designs for your ESF initiatives that include recommendations on pen size, shape and detail to help minimize the untoward effects of social hierarchy in group housing. We will also meet with your management to help identify the best combination of animal flow and grouping strategies that promise maximum productivity and ease of use (eg static vs dynamic or pre- vs post-implantation crating). There is no substitute for success as over 30,000 sows are being fed by Compident ESF stations in AP Schauer designed pen gestation barns across the US.

GROUP FORMATION

PRE-IMPLANTATION

Sows are crated after weaning and bred in the stalls. Groups are constituted as soon as animals are out of standing heat. This spares sows the potential of injury if they were allowed to ride each other while in heat. Fertilized eggs are still free floating as they migrate down the fallopian tubes into the uterus prior to the onset of implantation. Any physical skirmishes that might be expected during the formation of a new group do not negatively impact the free floating embryos prior to implantation. This also minimizes the number of gestation stalls in the barn which can be important to markets concerned about animal welfare. It also allows for the most nutritionally challenged animals in the herd, those coming from farrowing to get maximum exposure to the best nutritional tool we have to feed sows, the ESF station. Herd productivity as good or better than gestation stalls can be achieved with this system.

POST-IMPLANTATION

Sows are crated after weaning and bred. Groups are constituted only after being confirmed pregnant between 28 and 35 days post-breeding. Implantation is complete before mixing sows and thus pregnancy loss associated with the establishment of social hierarchy during implantation is avoided. This approach most resembles the basic reproductive management of a sow herd housed in crates. However, post implantation grouping does not take full advantage of the systems nutritional benefits post weaning and given that as many as 40% of the sows in the breeding and gestation barn remain in crates, it may not meet the expectations of the marketplace in regards to welfare.



“Let the Experts at AP & Schauer assist you in designing a system ideally suited to your facilities, animal flow and management style.”



Embrace the Future!



GROUP STRUCTURES

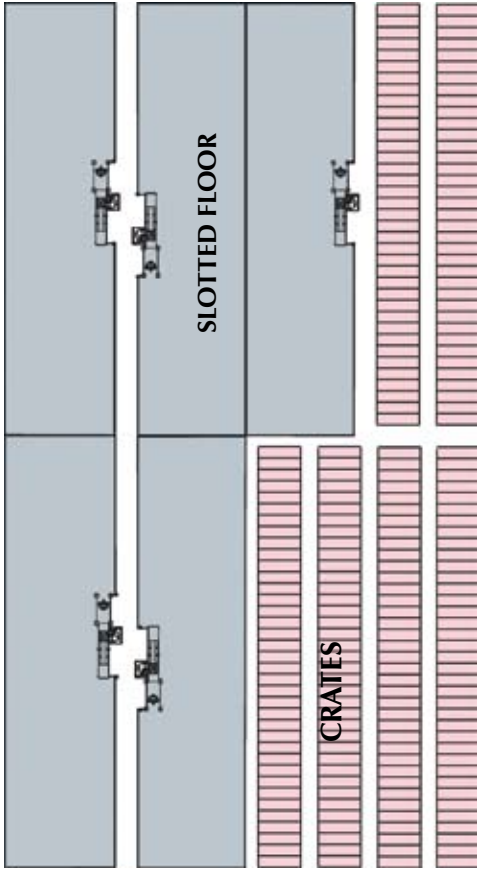
STATIC GROUPS

Group is constituted once, social hierarchy stabilizes, and the group is left intact for the duration of gestation. The goal would be to have one weeks breeding or a fraction of that weeks breeding in a larger sow unit be used to constitute a static group. The approach has the advantage that the breeding group stays physically in tact much as it would in a crated facility. However, static groups can create challenges in space utilization which can result in increased facility cost or decreased sow inventory. Static groups are an “all in / all out” system that requires additional barn spaces in reserve to allow for animal movement. In reality, very few gestation groups are truly static as some sows will drop out due to loss pregnancy, injury or death. This leads to suboptimal utilization of pen space by the end of the gestation period because sows removed from the group cannot be replaced. Alternatively, one can attempt to anticipate this fall out by over stocking the pen initially which can result in a less than ideal per sow space allotment.

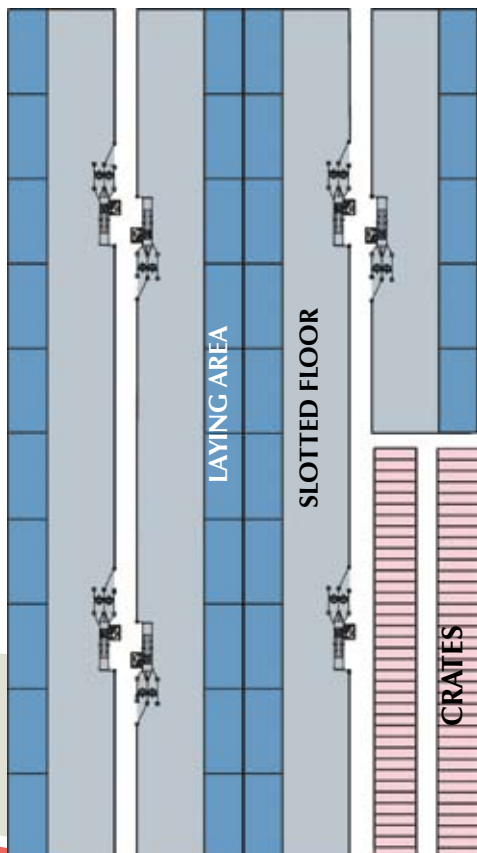
DYNAMIC GROUPS

Group constituency is constantly changing. Dynamic groups are essentially a “continuous flow” system which allows space utilization to be optimized in each pen. Weekly breeding groups are subdivided with animals being introduced into a number of different pens optimizing the space utilization in each pen. This approach works well with large group sizes and can also be used to optimize feed station utilization in sow units with smaller breeding groups. Social disruption and associated fighting is minimal in large groups and any repeat breeders can simply be re-bred and left in the same pen. It is not necessary to maintain the integrity of the breeding group because the computer system will track the location and monitor the status of animals regardless of their location. The feeding station can be used to sort or mark the sows for scheduled management activities as a group regardless of which pen the sows are located in. The flexibility in animal movement and the ability to achieve optimum space utilization in all pens makes dynamic groups an attractive solution for many herds.

No matter what your pen gestation requirements, the AP Schauer ESF Team will help you decide what combination of group management approaches is right for you and then work with you to generate a concept design that meets all your ESF needs. Together we can embrace the future.



Typical post-implantation layout with static groups.



Typical pre-implantation layout with large dynamic groups. Shown with solid sleeping areas.



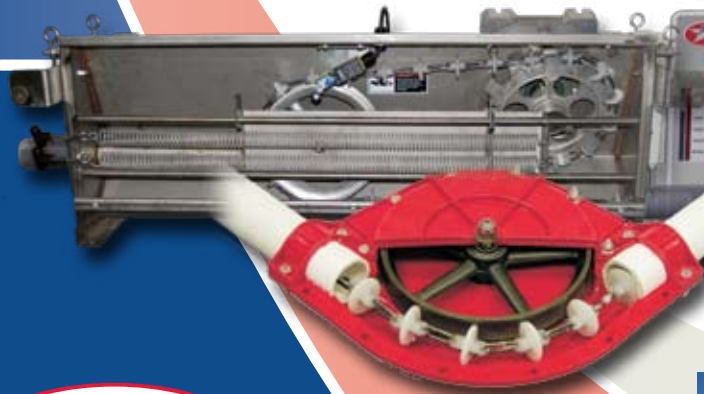
Positioning Compident ESF stations on walkways simplifies sow introduction and registration and provides access to the units for service.



Laying areas divided by partitions provide sow comfort and protection, decreasing aggression and promoting a stable group hierarchy.

Your Source for Innovative *Solutions*

In today's competitive market place, it is essential to maximize the efficiency and performance of your swine production facilities. AP is the industry leader in the manufacture of innovative, high quality durable and dependable swine production equipment designed to help you meet these goals. The Experts at AP are ready to assist you in implementing the latest technologies in monitoring, feeding, ventilation and housing backed by industry leading warranty, service and technical support.



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