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Trends in pig husbandry

Good income over the last two years resulted in a greater willingness of pig farmers to make investments. With the planned size classification system there are significant structural changes, both for the keeping of feeding pigs and also sows. Businesses with 500 sows or 3000 feeders will not be rare in the future. Arable farmers wanting to have a second pillar against profit losses are also coming-in as investors in pig feeding.

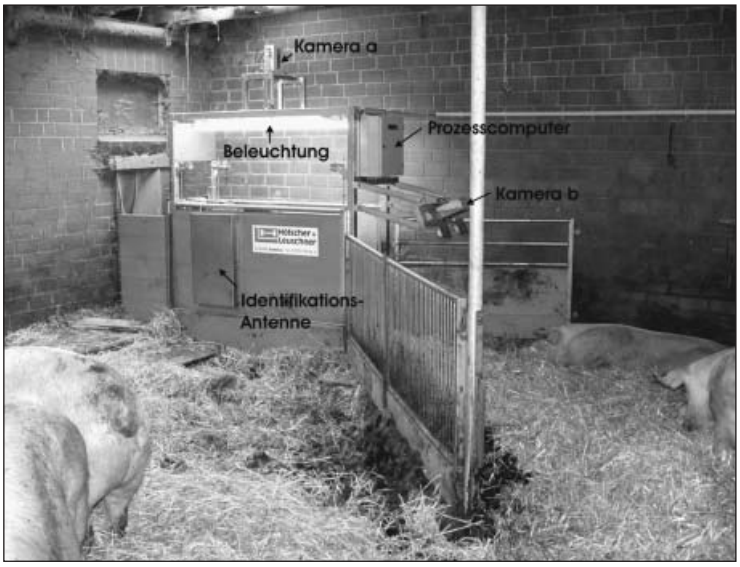

Fig. 1: The image processing system from Hölscher + Leuschner for the automatic control of sow health in groups was awarded a gold medal.

(Photo DLG/Stefan Klarner)

Regions with a large production of pigs, which up until now could be made competitive by good infrastructure, are reaching economic limits due to local regulations and the costs of liquid manure disposal. The use of technology or the relocation of production to arable farming regions are solutions to this.

The technology for liquid manure disposal and emission reduction (smell, ammonia) are very cost intensive. The presently planned size classes offer the chance through relocation to minimise these costs. Behind the entire problem exists the question for pig husbandry of whether in the future the direction towards location-related, area-independent production is correct.

Regulatory environment

The finalised production livestock directive for pigs is not on a level with EU requirements but nevertheless offers the advantage that for the forthcoming period planning can be done within a clear regulatory framework. Through the discussions over the two large livestock (GV) regulations for permit procedure and the concurrent increase of the BimSch (pollution protection) limits, as well as the liquid manure storage volumes, a facilitation of the stall construction permit procedure is to be expected. The requirement to remove the liquid manure storage out of the barn has been repealed, which for feeding barns again leads to the planning of deeper liquid manure systems.

The method for keeping groups of sows has also been confirmed by the new pig husbandry regulations. The technology here is ready for practice and will be further improved by additional management aids. The space requirements for pigs are once again uniformly regulated for Germany. The removal of requirements for feeding pig pen structure suited the selective behaviour of animals who seemed to prefer life on uniform flooring.

Additional record keeping obligations for compliance requirements must be fulfilled by pig keepers. Management aids are available for this so that multiple records are avoided in future.

Husbandry methods

Conventional husbandry methods have become stabilised. With the now planned size classification system and the requirements for hygiene as well as for production security (Q & S), alternative methods of husbandry have new retreated into the background.

The keeping of large groups of fattening

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Keywords

Pig husbandry, husbandry methods, housing construction

pigs has become the preferred method. Pen numbers of 25 to 50 animals are the most common choice. The group size for loose-housed sows depends on the choice of feeding method (call station - ad lib). Automatic sorting systems using optical recording or automatic weighing are technically perfected and used in practice. Management aids, with which identified animals can be selected out, are available and facilitate the handling of animals. For these husbandry methods 300 to 400 animals are recommended as group size.

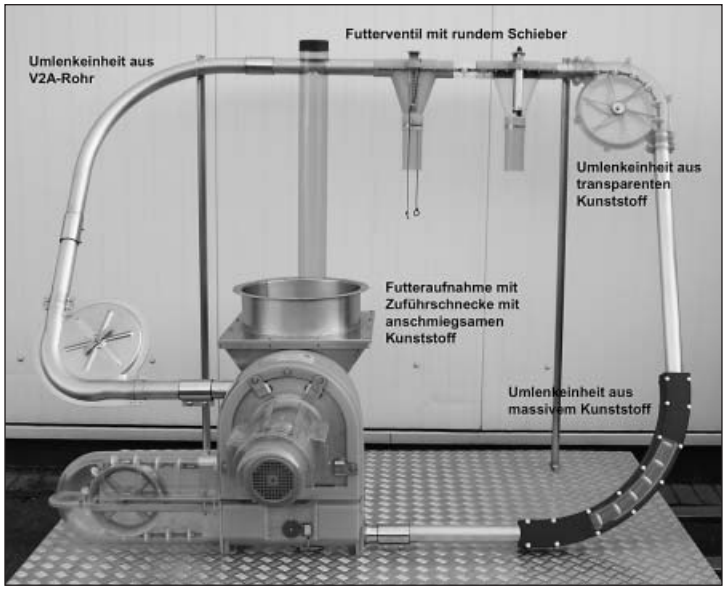

Fig. 3: A silver medal was awarded to the "Dry feed hygiene unit" from Tewe-Electronic GmbH & Co KG (H22 St F 11)

Technology

Improvements in hygiene for feeding installations both for dry and liquid feed are being further developed. Automatic dosage in pipelines and mixing containers are standardised. The pre-set quantities meanwhile can be controlled and recorded. Through integration of control programmes it is possible to efficiently link together important production benchmark values that were previously controlled separately. In this way alarm functions, productivity improvements and the simplification of work cycles are achieved. Possibilities for remote control by mobile 'phone facilitate the monitoring and operation of distant locations. Silo meters linked with an automatic ordering system for subsequent deliveries of feed simplify the work cycle.

Rising energy prices are causing businesses to make technical improvements to air heat exchangers. Their use is mainly practical for the breeding of young pigs. Due to the high requirements for warmth and the higher specified temperatures, an economic efficiency threshold is reached much sooner than for fattening.

Feeding installations for both liquid and dry feed are being improved in detail. Hygiene and operational improvements stand in the foreground. For large numbers of sows the use of liquid feed is increasingly being taken into consideration. The advantages for the breeding of young pigs and the cheaper transport of feed within the operation explain this trend. The potential to positively alter the feed by natural fermentation or by additives is only possible with liquid feed.

The construction of buildings for pig husbandry is subject to rising prices due to the strong demand. Larger units absorb these only partially. Housing made from prefabricated modules share the market with conventional buildings from specialist firms. Nail plate truss constructions are increasingly being used rather than steel constructions as they are cheaper. Also for foundations (liquid manure systems), prefabricated modules are increasingly available.

Slatted concrete floors have been available for a long time with modified design. Since the slats are no longer arranged longitudinally but instead transverse to the element and fabricated as frames, they are now lighter and somewhat less expensive.

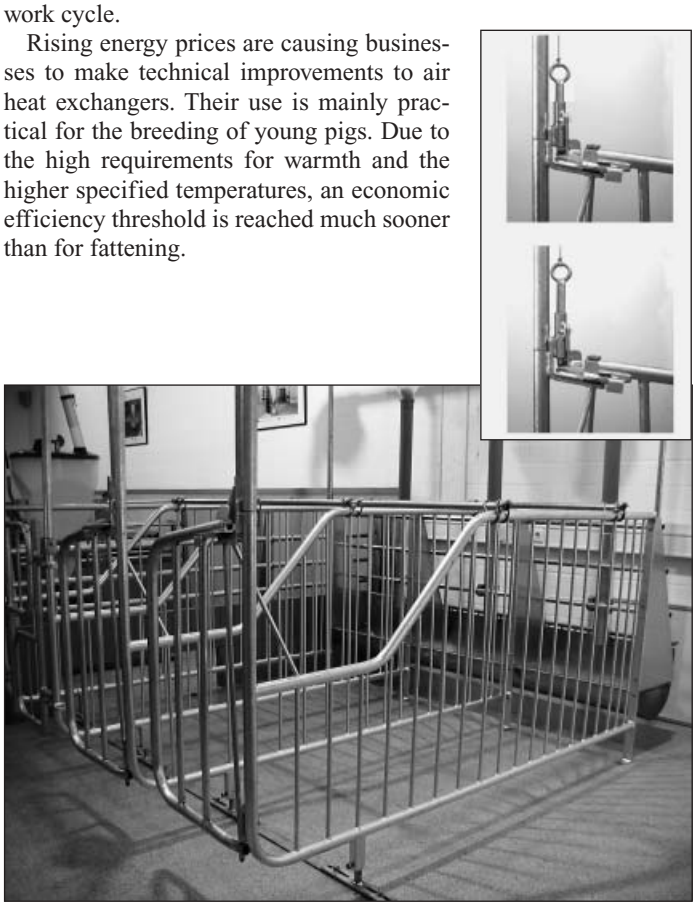

Fig. 2: The convincingly simple and entirely mechanically operated "Swingfix pendular-door self catching pen" from Bernhard Mannebeck Landtechnik GmbH (H26 St E 5) was awarded a silver medal

Summary

The revitalised investment opportunities in pig husbandry are based on good returns over the last two years and offer once again a secure foundation for planning within the regulatory environment. Larger production units have the advantage of absorbing the increasing construction costs. In intensive pig producing regions additional costs exist from the necessary liquid manure transportation and the realisation of additional regulations relating to emissions. New, larger, planned production units can avoid this problem by relocation to arable farming regions. New technology in the area of data interchange facilitate the monitoring and operation of the housing installations and nowadays direct access is already possible.