Livestock Industry Facilities and Environment: Swine Breeding Systems—the MO-Flex System

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The MO-Flex Swine Building System allows for any production stage (Farrowing, Nursery, Grow-Finish and Breeding/Gestation) to be built using the same structural building shell design. The building shell is post frame construction attached to the top of 8” reinforced concrete walls with 40’-2” inside building dimension. Concrete details change between the different production stages. This is to maximize flexibility for future changes from buildings of one function, to another.

The breeding system is designed with the breeding pens in the center of the building. Boar crates are located on either side of the breeding pens while the weaned sows are located on the ends of the breeding pens. An area near the boars is designated for gilt development.

Advantages of the system include:
- Animal movement is circular and accomplished with one person;
- The layout is structured for possible conversion to finishing;
- Dedicated breeding pens make non-slip flooring possible;
- Minimal space wasted when converting to AI;
- The building design is narrow enough to facilitate good natural ventilation.

Disadvantages include:
- Sows are continuously exposed to boar stimulus, thereby making heat detection more difficult;
- Gilt pens are partially slatted and may be a problem to keep clean;
- Conversion to finishing may cause problems due to partially slatted flooring.

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Figure 1 The MOFlex breeding design with two breeding pens. The same configuration is used for up to four pens in one place (Tubbs, 1995)