

SWAP 2

Sow Welfare And Piglet Protection 2

SWAP2 is developed with an offset in a farrowing pen for completely loose sows – with an add on possibility to confine the sow in order to protect the piglets during the first critical days.



The **SWAP2** considers the needs of the sows, piglets and employees at the same time e.g:

Considerations for **the sow**:

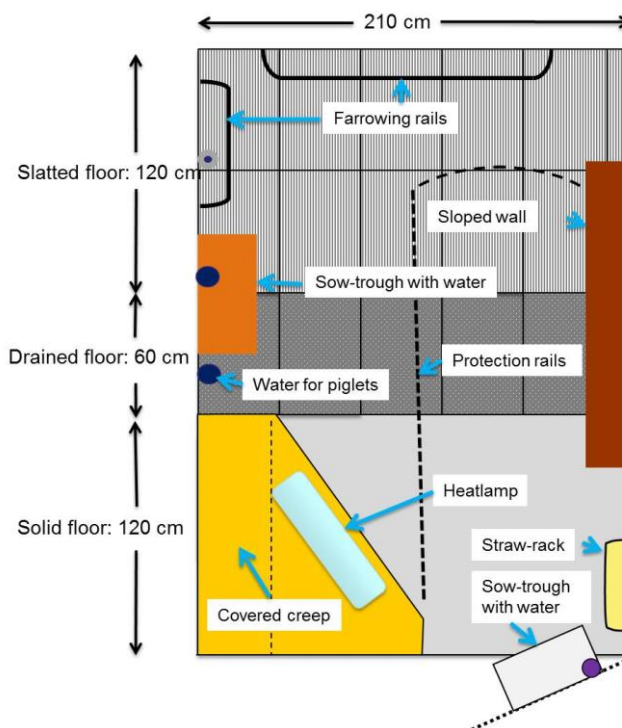
- A sloping wall, which supports the sow in its lying-movements
- Wide rear-gates, which assures that the sow can get up and lie down unhindered, even when the sow is confined.

Considerations for **the piglets**:

- A possibility to limit the sow's movements during the first days, in order to reduce piglet crushing
- 'Fingers' at the bottom of the sloping wall, which assures a good access to the udder, independent of which side the sow is lying on, while confined
- A covered piglet creep with a climate that considers the fact that piglets have a higher temperature need than sows do

Considerations for **the employees**:

- to be able to safely, easily and quickly take care of the piglets during the first critical days, by being able to confine the sows' movements
- The floor profile is a combination of a solid floor, a drained floor and a fully slatted floor, which provides good hygiene and a possibility to administer different materials



Other important characteristics:

- The pens are fitted with partly solid floor, which reduces the surface area of the slurry in order to assure a low impact on the environment without requiring substantial investments
- All dimensions and distances in the pens are based on measurements from Danish crossbred sows and their piglets in order to assure optimal use and a high productivity in the pens.
- Limiting the sow's movements from day 114 of gestation until 4 days after farrowing has been found to have no effect on farrowing and stress level (measured by cortisol concentration in the saliva).
- The inventory fulfills different roles e.g:
 - The sloped walls provide support for the sow during lying movements as well as providing protection for the piglets.
 - The covering towards the creep area is a special designed farrowing rail, which combined with the sloped wall provides a possibility to limit the sows' movement during the first critical days, where the risk of piglet crushing is highest.

Read more about the **background** for the SWAP2 pen at:

- www.iph.ku.dk/swapfaresi
- articles in:
 - Journal of Animal Science (doi:10.2527/jas.2015-8973)
 - Applied Animal Behaviour Science (doi: [10.1016/j.applanim.2016.07.008](https://doi.org/10.1016/j.applanim.2016.07.008))
 - Animal (doi: [10.1017/S1751731113001869](https://doi.org/10.1017/S1751731113001869))

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