

## H1 - Preparing the farrowing facility and farrowing pen



**Farrowing pen, clean and dry, and ready for a sow.**

### **A good environment requires clean and dry pens:**

1. Soak for 6 - 12 hours.
2. Wash pens and equipment systematically. Be aware of caking in the trough and feed pipes.
3. Disinfect the pens. If you use a water soluble disinfectant, the facility must be dry as the disinfectant will otherwise become diluted.
4. Dry the pens. The facility must be completely dry before sows are introduced.
5. Check nipple drinkers. Check that each nipple drinker produces min. 4 litres a minute.
6. When sows are introduced, make sure that empty pens are evenly distributed in the facility.
7. Supply straw or other nesting material to the sows in the week leading up to farrowing.
8. Adjust the inlet temperature of the floor heat to a surface temperature of 34 - 35°C (max. 36°C) when the heat lamp is turned on (check this with an infrared thermometer).



**Farrowing facility poorly cleaned and still wet, and therefore not ready for sows.**

### **Drawbacks of a wet facility upon or after introduction of sows:**

- A poor environment for the sow and her newborn piglets.
- Cold piglets get a poor start in life. They are slow in getting to the udder and thereby in getting milk.
- A cold udder stresses the sow and may cause mastitis.
- Reduced air flow resulting in a poor air quality.

### **Faeces in pens:**

- Increases infection pressure.

### **Feed remnants/caking in the troughs:**

- Low level of hygiene, increased infection pressure and reduced appetite among the sows.

<b>Additional comments - Preparing the farrowing facility and farrowing pen</b>	
1.	<p>Remove loose manure and feed remnants etc. with, for instance, a shovel. Subsequently sprinkle pen partitions and floor thoroughly, but do not let water run directly into the slurry pits. Plan soaking according to the workplan to ensure that the facility has been soaked and washed, and is dry before you introduce sows.</p> <p>Dry cleaning, ie. the pen is only scraped and swept, is not enough to significantly reduce the infection pressure.</p>
2.	<p>Remove all visible dirt during wash. You cannot use a high-pressure cleaner for washing farrowing facilities that are not sectioned without negatively affecting the environment of the other sows and piglets in the facility. You can reduce the impact on the environment in the facility by using, for instance, a curtain between the rows of pens or by using a hose only. Alternatively, only practise lime washing or dry cleaning. Discuss cleaning strategy and options with your pig advisor.</p>
3.	<p>Drying the facility after wash is in itself an efficient way of preventing transmission of disease between each batch of pigs.</p>
4.	<p>The facility is dry when the floor temperature is identical to the housing temperature. Place a piece of paper on the floor; if it shrinks/crumples within a couple of minutes, the floor is still wet. Alternatively, place a plastic folder on the floor; if the floor changes colours within a couple of minutes, it is not dry. If the facility is not dry, water will evaporate from the floor, and this will make the floor and pen partitions cold. It will also reduce ventilation resulting in a poor climate in the facility.</p> <p>Drying is best done at 25°C, and generally it requires 0.3 litres of diesel oil to dry 1 m<sup>2</sup>.</p> <p><b>The outdoor temperature greatly influences which method to choose for drying the facility:</b></p> <ul style="list-style-type: none"> <li>• <b>Outdoor temperature &lt;10°C:</b> Add heat, for instance with a mobile oil burner that for 4-8 hours yields approx. 1 kW per farrowing pen.</li> <li>• <b>Outdoor temperature 10-20°C:</b> It is necessary to add heat if the air humidity outside is high, for instance during cloudy weather or rain.</li> <li>• <b>Outdoor temperature &gt;20°C:</b> In most cases, you will be able to dry the facility by setting the ventilation system to maximum performance until the floor and pen partitions have reached room temperature.</li> </ul> <p>It is extremely critical for the piglets if the floor in the farrowing pen is not dry. Newborn piglets have a lower critical temperature of 34°C, but will perceive a wet floor as being 24-29°C. Cooling also increases the risk of mastitis. The pens <b>must</b> therefore be completely dry before transfer of sows. The relative air humidity in the farrowing facility should be 50-70%. You can check the air humidity with a wet/dry thermometer. The sum of temperature and air humidity must be 85-90.</p>
5.	<p>Insufficient water intake reduces the feed intake of the sows. Water requirement during lactation varies from min. 35 litres a day up to 50 litres. The pressure must be 2-2½ atm. when one fifth of the sows in the facility are drinking simultaneously. You can check the output by drawing off water into a plastic bag or a measuring cup for 30 seconds and then measure the volume and multiply this by 2. To obtain a fair view, do this when the water system is being used, for instance around feeding, wash or water intake to the liquid feed system.</p>
6.	<p>If the pens along the outer walls are empty, there will be a non-uniform production of heat in the facility. Empty pens should therefore be distributed evenly across the middle of the room. <u>Never</u> have empty pens under ventilation sensors. This applies to both diffuse ventilation and ventilation with air inlets.</p>
7.	<p>Nesting may shorten farrowing and reduce piglet mortality. The supply of straw or other nesting material in the week leading up to farrowing is a statutory requirement. See Appendix 9 - Rooting and enrichment materials.</p>
8.	<p>You can buy an infra-red thermometer for approx. DKK 800 from your local pig advisory office. See H13 - The environment of the piglets.</p>