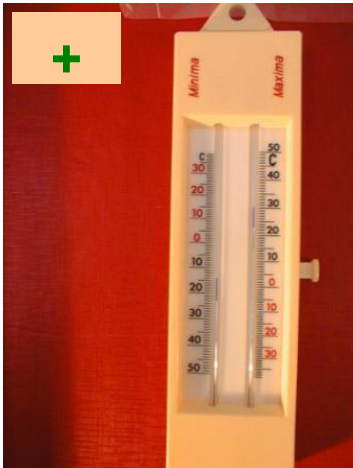


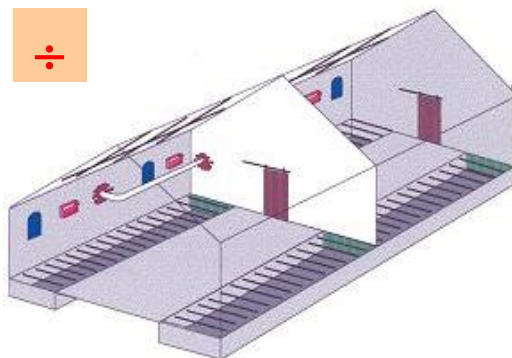
H23 - Temperature and false air



Test of ventilation system

Note all values on the controller before testing the ventilation system.

1. Record the temperature in the facility close to the sensor.
2. Check that the recorded temperature is the same as the desired temperature and the temperature shown in the display.
3. Check that the desired / adjusted temperature matches the pigs' growth stage or the temperature strategy.
4. Differences between recorded and desired temperature of more than 4 - 5° C = insufficient capacity.
5. Test the ventilation system at minimum and maximum ventilation rates.
6. Check XP band. There can be two principles:
 - a) XP band is usually 4° C for finishers and 2° C for weaners.
 - b) Comfort temperature. In facilities with diffuse ceiling the temperature is normally 0° C (it also applies to combi diffuse). In facilities with wall and ceiling inlets it is normally 2° C.
7. Check for false air intake.
8. Check the attic. The insulation must be placed correctly and not be covered by dust.
9. Check the exhaust units. Dirty exhaust units reduce ventilation output by approx. 20 per cent.



Be aware of false air intake

- Are there visible dust wedges on the walls in diffusely ventilated facilities?
- Are doors and windows closed?
- Are pipe ducts sealed?
- Are doors, windows and wall / ceiling inlets joined?
- Are common slurry pits efficiently shut off?
- Are slurry plugs fitted?
- Is insulation placed correctly?

Additional comments - Temperature and false air	
5.	Test minimum ventilation by reducing the set value for maximum ventilation to the set value for minimum ventilation, and vice versa for maximum ventilation.
6.	The XP band is the range of degrees across which ventilator and damper work from minimum to maximum. Set the XP band to 4-5° C. If the band is lower / narrower, the system will start 'hunting'.
7.	<p>False air intake is typically seen by doors, windows, pipings etc. Sliding doors are not suitable for facilities with negative-pressure ventilation. Common slurry pits for several sections are not recommended. A water seal must be installed in the tank (failure to do this is highly dangerous).</p> <p>A pressure test is made at maximum ventilator rotations, fully open outlet dampers, but closed valves. Compare the recorded negative pressure with the output of the ventilator (see specification). If more than 25 per cent of the minimum ventilation is taken in through leakages, the ventilation system is not running on optimum capacity.</p>
9.	Clean exhaust units regularly. Clean them minimum once every spring when the need for ventilation increases.