



DA 2000 High-Pressure Cooling

For pig production



Well-being and productivity

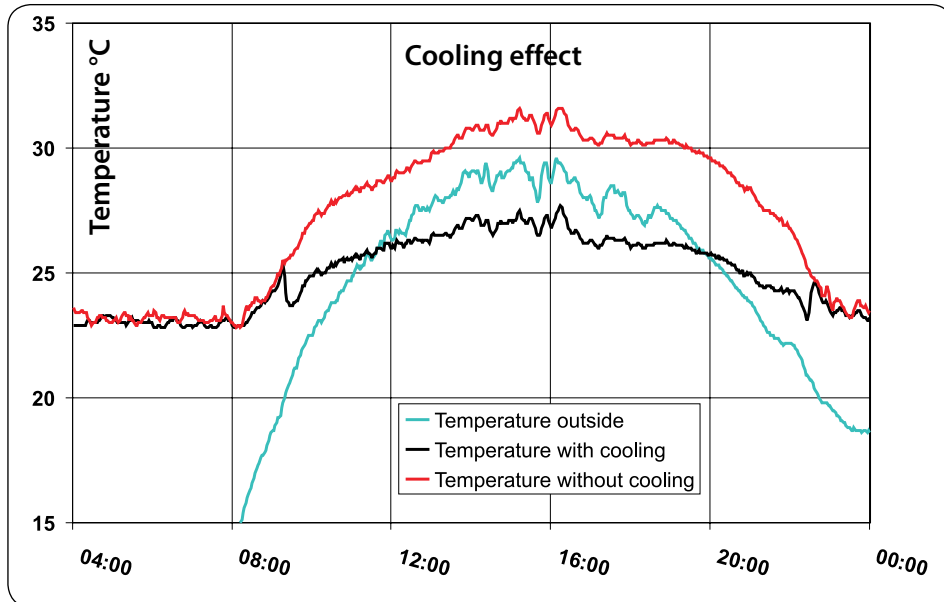
High-pressure cooling is good for the pigs and creates a comfortable working environment inside the pig house. Water vapour can have a very beneficial influence on the pigs' well-being in the summer heat. The water vapour can reduce the inside temperature by 5-6 °C.

daily gain and an increased mortality rate among the pigs when the outside temperature exceeds 30 °C.

Already when the house temperature reaches 24-26 °C, the pigs start behaving differently - they make themselves dirty on



High-pressure cooling should be regarded an extra possibility of reducing the temperature in the pig house; incidentally, high-pressure cooling can be used regardless of the ventilation principle.



SKOV high-pressure cooling - quality and flexibility

In the development of the high-pressure cooling system from SKOV, great importance has been attached to quality and flexibility. The quality is ensured by using long life components of great reliability. The system is very flexible, as it comprises standard components, which can easily be adapted to the specific house.

Pigs are sensitive to high temperatures and the hot summer periods may have serious consequences for their well-being and productivity. With high-pressure cooling, the house air is provided with finely atomized water vapour. During the evaporation, process the warmed-up air inside the pigs house is cooled. High-pressure cooling reduces the temperature by 5-6 °C depending on the actual temperature outside the pig house and the relative humidity.

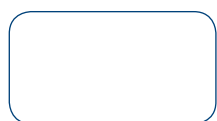
the solid floor. If the temperature exceeds 25-27 °C, there is a tendency of the litter sizes being smaller and the quality of the boar's semen degrading.



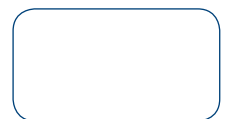
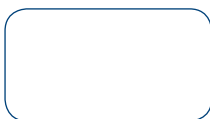
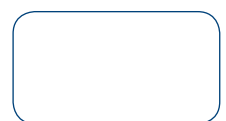
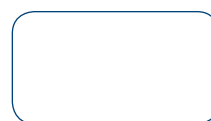
Pump unit - complete with filters

The pump forms the basis of an efficient cooling system. Three different types of pump units (from 5 to 22 litres per minute) are available, ready for connection of power and water, see picture. Efficient filters ensure a reliable system with long life. As a standard, the pump is equipped with filters, which filter out 95-98 % of the particles from the water (1 micron). Furthermore, the pump can be equipped with extra phosphate filters and electronic lime decomposer for optimum reduction of calcium and minerals in the water.

High-pressure cooling is topical during hot periods because even with a high air output in the livestock house there will, in practice, be a considerably lower



If extensive cooling is required through high-pressure cooling, the air output should also be kept at a high level





Piping

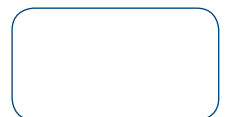
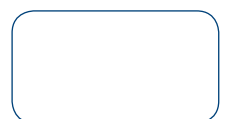
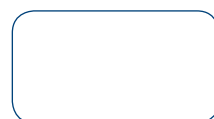
Only stainless, acid-proof pipes and sockets of great durability and long life are used. Holes for nozzles can be made with a special pair of nippers after installation of the pipes. Thus, the nozzles in the patented nozzle clips **FlexClamp** can be placed anywhere, which permits optimum placing above the air inlets.

Nozzles

The patented nozzles are equipped with a filter in front of each nozzle head, which reduces the risk of calcium deposits. The nozzle heads are also available with anti-calcium coating, which reduces problems with calcium deposits even more. All nozzles are mounted with antidrip valve.

Automatics

The cooling system can be controlled either manually or automatically by the climate computer of the livestock house.



High-pressure cooling systems - more than cooling

A high-pressure system for cooling has other functions than cooling of the air in the livestock house:

Soaking

Between the crops, the high-pressure system can be used for soaking of the house. If the ventilation system is switched off, the fog will soon soak all internal surfaces making cleaning faster and more efficient.

Disinfection

The system can also be used for disinfection

of the house. If the system is used for disinfection, it is often possible to obtain lower germ figures than by solely using high-pressure cleaning.

Furthermore, several disinfectants are approved for usage in livestock houses. Thus, the risk of infection can be lowered in the herd.

Humidification, dust binding and improved working environment

The high-pressure cooling system can also be used for humidification and dust binding

where a regulation of these factors will improve the environment in the livestock house.

The working environment in the pig house can also be improved by means of the high-pressure cooling.

The SKOV climate computer holds the working environment function. It increases both the ventilation and the activation of the high-pressure cooling system when staff is present in the house. Thus, dust and gases in the house air are reduced and the temperature is lowered at the same time.



SKOV supply climate and production management systems for animal production the world over. Our solutions are technologically advanced, user friendly and individually adapted to meet the needs of our customers.

SKOV A/S • Hedelund 4 • DK-7870 Roslev
Tel. +45 72 17 55 55 • info@skov.com • www.skov.com

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