



Slow growing poultry production farm at Agardsholm owned by Rasmus Skov, the grandson of one of the founders of the company.

SKOV hosts Australian delegation in Denmark



By **PETER BEDWELL**

During April, a delegation from Australia visited the headquarters of SKOV in Glyngore, Denmark.

SKOV's Sales Manager Arne Overgaard was hosting the guests and he had planned a program that included a farm visit to the slow grow production poultry farm in Agardsholm, belonging to Rasmus Skov, the grandson of one of the founders of SKOV.

Another visit was planned for the Danish broiler producer Frijsenborg.

The delegation also listened to various presentations from some of the company's climate, production and poultry specialists.

Amongst the visiting Australian contingent were Luke Trevanion and Tony Young from Santrev, Luigi Di Clemente from Farmmark and Bill

Williams, CEO of Proten and James Wentworth, CFO of Proten.

"SKOV contributes to efficient and sustainable global food production that delivers healthy food produced in respect to animal welfare.

"We provide climate solutions, farm management, and digital value chain services for animal production worldwide," said Tommy Krogh, Business Development Manager – Poultry Specialist with SKOV.

Apart from the headquarters in Denmark, SKOV has subsidiary companies in Thailand, Russia, China, and the United States, and a software development department in Malaysia. The SKOV group also includes Secco International Inc. in Canada.

The headquarters has expanded on several occasions and today, there is in excess of 16,000 m² under one roof.

"The next landmark on the timeline will be when we put a new logistics centre into operation. It covers an area of another 16,000 m².

"The new logistics centre brings together the warehouse in Denmark at one location close to our local subcontractors.

It features cutting-edge technology to optimise the work processes and thus facilitates the distribution of our ventilation solutions worldwide at competitive prices.

"Having been present in the market since 1966, SKOV has become one of the world's leading suppliers of ventilation and farm management systems and counts more than 500 employees."

In the middle of the 1960s, the brothers Kristen and Kjeld Skov developed the first ventilation system and ran the largest egg production facility in Scandinavia at the old manor house of Oestergaard Hovedgaard.

The idea of a ventilation system was born out of the connection with the construction of two new livestock houses. The brothers could not locate a system with the capacity to ventilate houses of the envisioned magnitude, so they set about developing ventilation systems themselves.

The sale of ventilation solutions for poultry and pig houses began in 1966, thus establishing the foundation of today's SKOV.

Ventilation systems manufactured by the brothers quickly gained popularity, and owing to lack of space, they built a new factory in Glyngore in 1978.

In 1982, the export adventure began to pick up speed with some huge orders to Northern Africa, and since then, new systems and products have been developed and exported worldwide.

Today, the company is a world leader in its field, and export accounts for more than 90% of the turnover.





SKOV BlueFan BF 50

Perfect fan for renovations and new build

Retrofit

It is easy to replace existing box fans with the new BF 50. Installation is so quick, that it can be done between batches:

- Arrives assembled – a robust fan that is easy to install
- Fits in the existing holes in the house – no need for new building structure
- Reuse the existing cables in the house – easy additional wiring for motor-controlled shutter and LPC variable



FEATURE

◁ The first visit to the farm belonging to Rasmus Skov allowed the Australian contingent to experience the methods for slow growing birds. The farm has only recently converted to slower growth genetics.

The farm consists of two houses made of sandwich construction with 50,000 slow growing broilers in each house.

Tommy Krogh, SKOV's climate and poultry production specialist revealed to *Poultry Digest* the specific SKOV equipment used on the RASMUS farm includes:-

- DA 1200 inlets and DA 600 outlets
- DOL 539 controller and DOL 2400 alarm system
- High-pressure cooling and Spiraflex heating
- SKOV production equipment
- Rokkedahl Heat exchanger

"The fact that the farm uses a slow growing method is now typical of Danish poultry farms where 60% of poultry consumption in Denmark consists of slow growing birds," Tommy told *Poultry Digest*.

Rasmus Skov explained to the visitors "that the hatching of the birds is done inside the sheds".

"The 53,000 eggs are purchased and placed directly into the sheds where they hatch and grow to maturity.

"He explained that the expected rate of hatching is around 95% and the floor is heated to 31 degrees C using under floor hot water.

"That's something we may have to reconsider in Australia," said Luke Trevanion from Santrev.

"With the current price of LPG in Australia it might be an alternative cheaper source of heating."

"The birds bedding is made of grass pellets spread on top of the concrete flooring," Luke also mentioned.

Given the rising cost of bedding material like wood shavings or rice hulls in Australia and the difficulty some growers here are experiencing is disposing of spent litter, the use alternatives like grass based bedding may be worth considering.

In markets like the US where traditionally litter is not cleared out after each batch there has been a move to grass based litter.

One of the reasons for this, apart from the cost of other bedding materials is the move to drastically reduce antibiotic use.

To assist in the move to AB reduction or removal from poultry production there is a greater need to remove litter more frequently.

This also applies to many European ▷



1. The Australian contingent at the SKOV headquarters. 2. The delgation outside the castle where SKOV started 45 years ago. 3. On site at the Frijse nborg farm. 4. Mikael Jensen at Frijse nborg farm. 5. Mikael Jansen explains the egg hatching system to Bill Williams from Proten.

market. Research conducted by North Carolina State University has identified a number of grass species that are suitable for use in poultry bedding. Switchgrass, Bermuda grass and Miscanthus grass have been trialled as bedding materials for broilers and turkeys.

“The second farm visit was to Frijsenborg Agriculture in Hammel where the poultry is reared in 24 houses on six different locations,” Tommy told *Poultry Digest*.

“They use much of the same SKOV equipment as on the Rasmus Skov farm and the sheds vary in size from 19,000 to 60,000 birds.

“The broiler birds have access to an open area attached to some of the houses which you could identify as a ‘Winter Garden’ or Veranda housing system,” Tommy said.

The Frijsenborg operation is a part owner of Danhatch Special breeds, producing the Ranger Gold genetics and on this farm they have three units dedicated to rearing parent stock.

“Other critical infrastructure includes a biogas production plant, utilising over of 250,000 tonnes of poultry waste per annum.

“There is also other farming activity on 3,000 hectares of land and there is 7,000 hectares of forest attached to the broiler rearing operations

“In between farm visits the contingent from Australia attended the SKOV headquarters and were informed about all the latest developments at our company,” Tommy concluded.

The specific SKOV equipment used on both farms includes:-

DA 1200 wall inlets providing fresh air to the livestock house which provide a good uniform climate all over the house, even at minimum ventilation.

The outside air is directed toward the ceiling of the house and mixed with the existing air before it reaches the zone occupied by animals.

This method does not cause any draughts and thus leads to uniform distribution of animals and thereby the same growth conditions for all.

During hot periods, a higher air velocity can provide a cooling effect for the animals.

DA 1200 bricked-in wall inlet is suitable for sandwich board shed walls and available for various thickness specifications.

The inlets require no additional support in connection with bricking in or fixing inlets in walls.

- The DA 1200 inlet system delivers
- Uniform climate all over the house
 - Inlets close tightly – no draught or false air intake



1. The Frijsenborg broiler farm which has 24 houses on six different locations. 2. Light cowls over mini vents at Frijsenborg. 3. SKOV controller at the Rasmus Skov poultry farm.

- Fully insulated – no condensation or ice formation
- Operated by a pull rod – all inlets maintain the adjusted opening degree
- Maintenance-free and long durability

DA 600 is a robust and efficient exhaust unit. These aerodynamic chimneys are developed for maximum air output at low energy consumption levels.

The chimneys are particularly robust under all weather conditions and have a very long service life. They are custom-fit to the building and can be used on virtually any type of livestock house.

They can be adjusted to fit the roof pitch of individual buildings, colour and placement.

The LPC fans are a series of energy-efficient fans that are particularly suitable for ventilation of livestock houses and optimised to work with SKOV's ventilation systems and chimneys.

An LPC fan has a high level of pressure stability, and it is less sensitive to wind, they deliver,

- Aerodynamic and optimized to the LPC fan
- Maximum air output at low energy consumption
- Robust under all weather condi-

tions

- Profiled roofing sheets – no need for sealing
- Side or ridge-mounted – easily adapted to the roof
- DOL 2300/2400 alarm can be ON/OFF or temperature-controlled
- DOL 2400 alarm system can monitor the temperature of up to 100 houses and can also be used to warn of equipment faults and other emergencies.

The alarm system includes advanced temperature monitoring with temperature compensation.

It can also receive analog input from capacitive sensors and generate an alarm if the silo level is too low or the water consumption has changed.

The alarm system can generate silent alarms, general alarms, and local alarms such as sirens, flashing lights, and loudspeakers. In addition, you can receive a phone call and a text.

The Spiraflex finned tube heating system is based on the supply and circulation of hot water and maintains high productivity during the cold periods.

Using finned tubes to heat livestock houses, you get an efficient and quickly responding heating system, ensuring an optimal climate for the animals.

CONTINUED ON PAGE 48 ▷



Egg Farmers of Australia

WHY CONSUMERS AND EGG BUYERS NEED TO PAY MORE

This May, egg and poultry industry participants will gather on the Gold Coast for the annual Poultry Industry Exchange (PIX) conference.

One issue that will be on the mind of egg farmers will be the rapidly rising costs of farming, versus the low returns they receive for their product. Despite farm costs going up in 2022, the farm gate price of eggs still remains at 1990 levels.

Aussie consumers are being warned they will need to pay more if they want their food, such as eggs, to be grown in Australia - as farmers struggle to cover skyrocketing input costs.

At the same time, wholesale buyers (supermarkets, manufacturers and hospitality) are urged to review their contracts to ensure farmers get a fairer return for their product, to stay afloat.

The warning comes from Egg Farmers of Australia – which advocates for Australia’s peak cage, free range and barn laid egg farmers – most of whom are from family-run farms.

In recent times on many egg farms, the cost of started pullets (young laying hens) had increased 20%, fuel prices jumped 25%, feed grain costs rose by 45%, and the cost of canola oil had climbed 141% per tonne.

The speed of rising farm input costs, that are required to raise hens and produce quality eggs, is so alarming that some long-term egg farmers are genuinely fearing for the future of our industry.

It is a reality that Australians are going to have get used to paying more if they want their eggs and other food grown in Australia, or they’ll see Aussie farmers go out of business.

Likewise, wholesalers (such as supermarkets, bakers, food manufacturers, hotels, cruise ships and hospitality sectors) are urged to review the price they pay for Aussie eggs, to ensure our farmers get a fair and profitable return on their product.

Some of the factors that have caused egg farmers to carry increasing input costs over the past four years include:

- The impact of severe drought for the two years leading into COVID – which disrupted supply chains and dramatically reduced egg consumption
- Recent floods – which destroyed feed crops
- A seven-year delay by state and federal governments to re-write Australia’s Standards & Guidelines that govern animal welfare in the egg and poultry sector
- New government levies on farms to pay for the control of Avian Influenza outbreaks
- Devastating mice plagues in some states.

On the average egg farm in 2022: the price of wheat jumped from \$280 to \$360 a tonne, finished rations (hen feed) rose from \$400 to \$580 a tonne, and the price of started pullets increased from \$10 to \$12. Meanwhile, farmers also face a 12% hike in the cost of packaging, boxes and egg cartons.

Some farmers are also carrying huge debt as they prepare to transition from caged eggs and invest in free range egg production systems.

It’s a serious problem - if we want to continue to enjoy fresh food grown in Australia, such as Aussie eggs, then retailers, wholesalers and consumers must consider paying more to our farmers, so that they can stay afloat and maintain a future supply.

Melinda Hashimoto CEO, Egg Farmers of Australia

◁ CONTINUED FROM PAGE 12

SKOV heating components are of very high quality and are well suited for a harsh livestock house environment.

The heat emission level of the Spiraflex tube is, per meter, much higher than the heat emission of a smooth tube.

The tubes are mounted below the air inlets. The positioning helps provide correct ventilation with optimum mixing of cold air from the outside and heated housing air so that the animals are not exposed to cold air downdraughts.

The benefits include:

- An optimum environment as the system does not add CO2 to the air
- Optimises the air distribution at minimum ventilation – same good climate for all animals
- Finned tubes provide efficient and cost-effective heating of the air in the house
- Fully welded finned tubes, which ensure a high, documented heat output

They are easy to install with stainless splicing sleeves, and you do not need any tools or equipment

The SKOV 539 controller delivers:-

- Flexible solution of software and hardware
- Climate regulation is based on temperature and humidity, but also the CO2 and NH3 level
- Precise climate control – optimal growth condition for all poultry in the house
- Adaptive Control – artificial intelligence to secure higher productivity and animal welfare
- Dynamic MultiStep – low energy consumption and optimal climate

A SKOV controller controls the climate and production at house level.

FarmOnline shows photos and drawings of the farm, providing a high level of graphic recognisability and quick navigation. The program displays selected key values for temperature, humidity, ventilation, cooling, and heating through user-friendly graphic elements, and you can change settings directly.

All essential production data is displayed on one screen – providing a quick overview and enabling in-depth analyses. As both current and historical data is displayed for mortality, weight, and feed consumption, it is possible to monitor the development of the individual batches and compare them to each other.

The farms visited by SKOV’s Australian guests operate in very different conditions to down under.

But the common aspects faced by both Danish and Australian broiler production are high energy costs, pressure from consumers to produce slow growing birds, litter use/disposal and the critical need to reduce feed costs while extracting maximum benefit from available genetics.



Above: Tony Young from Santrev with Kerry Trevanion at Frijsenborg.