

Greenfield Poultry

AgriCool EC tunnel and destratification fans contribute to large savings



Technical data

Type	AF1250-001	AF0200-001
ebm-papst Product	50 inch EC tunnel fan	200mm destratification fans
Air flow	m ³ /h 49,191	545
Power consumption	W 1790	14
Number of fans	112	96

The fans are controlled through the AgriCool ventilation interface

Project



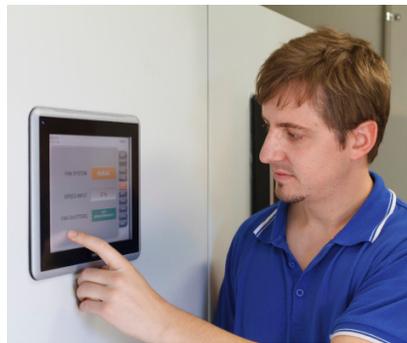
Greenfield Poultry is an eight shed broiler farm which operates a short drive from Bacchus Marsh in Victoria. Owned by Bobby Stankovic, the farm was constructed in 2014 with state-of-the-art agricultural equipment and systems.

Each Spanlift shed is 17.8m wide by 160m long and able to hold up to 50,000 birds. The minimum air speed required for the build was 3m/s.

Minimum ventilation requirements, increasing economic pressures and optimised system automation was accounted for with the future-proof design of this farm.

The AgriCool shed ventilation system from ebm-papst was installed for its highly efficient, energy saving, and automated design. The AgriCool system also features remote monitoring and infinite speed control features for optimal automated ventilation.

Application



14x 50 inch EC direct drive tunnel fans and 12x 200mm EC destratification fans from ebm-papst were installed in each shed. The fan system is controlled by HMI Electric's AgriCool interface. It works in parallel with the main shed controller by SKOV.

Each tunnel fan from ebm-papst was installed with a shutter system, controlled by a 24V DC actuator with an uninterrupted power supply backup system, providing a high level of system redundancy and reliability.

Each fan is able to be monitored and accessed from the shed's control room and remotely via an internet connection. The maintenance-free fans, system backups, and remote control capabilities of the system are optimised for high dependability and bird security. These features provide the farm manager and owner with peace of mind.

Benefits



The AgriCool interface allows for infinite speed control resulting in large energy savings. Inbuilt programming uses sensors to monitor the shed environment, adjusting the rate of ventilation to optimise the climate conditions inside the shed.

The destratification fans make the brooding phase easier, simpler and cheaper. Destratification fans move warm air from the roof down to litter level without scaring the birds, increasing the litter temperature and promoting even bird spread by improving bird comfort. This means that each shed's temperature distribution is only 0.2 – 0.3°C across the length of the shed, providing uniform growing conditions.

Optimised and uniform growing conditions, promoting even bird spread are constantly accessible with the AgriCool system. The high-level of efficiency, reliability, and redundancy provides peace of mind to the farmer.