

# Laminar Airflow Technology Now Also Available in the HatchTech Chick Storage Room

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**After chicks are taken from the hatcher, the saleable chicks are placed in transport crates and are stored in a chick holding room. Chick density in the transport crates is high, to reduce costs for transport. The optimal body temperature of day-old chicks is between 40.0 and 40.6°C. Within this temperature range the chicks are in their thermo neutral zone which means that heat production and heat loss are in balance.**

To remove heat produced by the chicks in the transport crates, airflow and air temperature are crucial. When air flow through the transport crates and air temperature are suboptimal, body temperature of the chicks is influenced. When there is not enough air flow through the transport crates, excessive heat production is not removed and body temperatures easily become too high (>40.6°C). When the body temperature of the chicks increases above 40.6°C, chicks experience heat stress and start panting to lose surplus heat. This increases water loss from the body and enlarges the risk for

dehydration. Dehydration will lead to higher mortality and suboptimal performance later in life.

To prevent dehydration and maintain chick quality after hatch, it is crucial to maintain body temperatures between 40.0 and 40.6°C. To obtain optimal and uniform body temperatures within a chick holding room, a combination of a uniform airflow and the optimal air temperature is necessary. The HatchTech Chick Storage Room is equipped with HatchTech's patented laminar airflow technology.

The specially designed, perforated radiators create pressure differentials that distribute the air in a uniform flow of parallel air layers. As a result the air velocity is uniform throughout the storage room.

The HatchTech Chick Storage Room can contain 144,000 chicks and is divided in 5 sections by the perforated radiators. Each section is equipped with a temperature sensor. Sensor information is constantly sent to the controller. The controller sends out a heating and cooling signal to each

individual radiator. The radiator in each section is cooled or heated by water that runs through it. Modulating heating and cooling valves fine-tune the radiator temperature according to the heat production of the chicks in each section.

The HatchTech Chick Storage Room will maintain chick quality by preventing heat stress and consequently dehydration. A HatchTech Chick Storage Room ensures supreme quality of all chicks that leave the hatchery.