Benefits through Safe Food Air Chilling

Workers safety
- No manual handling during chilling
- Easy access for cleaning

Savings
- Reduces drip-loss to less than 1%
- Reduces cooling time with up to 50%
- Reduces micro-organisms with 95% after chilling

Traceability
- 100% traceability for all chickens back to every flock
- First in & first out operation

Meat Quality
- Uniform and effective chilling to all birds
- No risk of freezing smaller chicken parts
- Minimal drip-loss
- Equalized core temperature
- In-line maturation
- Reduces micro-organisms with 95% after chilling

Workers welfare
- Fully automated non-stop operation

Defrosting
- Defrosting settings are pre-programmed and go on automatically. We provide different options for defrosting during production or production breaks.
The system can be programmed for cooling and defrosting periods during the night. This makes it possible to leave birds hanging in the Clean Air Chiller overnight without affecting the core temperature of the birds or condensed water forming on their surface.

Cleaning
- The cleaning programme for The LINCO Clean Air Chiller is user friendly. Due to the chiller’s clean air principle, only floors and shackles need daily cleaning and disinfection to avoid cross contamination and the build-up of micro-organisms. The outside of the tunnel and air ducts need cleaning on a weekly basis and cleaning inside the air ducts is required quarterly.

Control
- All cooling units are controlled by a PLC device. A matching touch switch controlled operating terminal provides all the information from the process and allows for changes in the all important process values during production.

Hygiene
- Risk of cross contamination is reduced to an acceptable level
- Reduced bacterial growth during chilling
- Hands-off operation
- No risk of condensed water
- Automatic, natural defrosting during chilling
- Easy to clean, Hygienic design

Hygiene performance which greatly reduces the risks of cross-contamination by utilizing a single layer layout and double-back conveyor runs. Moreover, drip-loss is minimal in this chiller as the cooling airflow partially crusts the skin and seals in the meat juices. A major benefit of not using water means stabilization and control of the bacteriological growth on the surface of the chicken. Furthermore, air chilling only leads to weight loss of less than 0.8% including free water on the surface of the chicken.

The actual Clean Air Chilling takes place while the birds are suspended in two-point shackles which open the carcass to a stream of cold dry air from specially designed nozzles. The nozzles effectively exhaust residual warmth from within the bird and allows the deep muscle temperature to be reduced from +40° to +4° C in less than 60 min. for 1200 g EV weight. The clean cool air surrounds the bird providing a uniform chilling of all parts including wings and drumsticks. Thanks to this direct clean air chilling, the danger of frozen extremities and surfaces is successfully avoided.

Clean air chilling

The Clean Air Chiller offers a superior hygiene performance which greaty reduces the risks of cross-contamination by utilizing a single layer layout and double-back conveyor runs. Moreover, drip-loss is minimal in this chiller as the cooling airflow partially crusts the skin and seals in the meat juices. A major benefit of not using water means stabilization and control of the bacteriological growth on the surface of the chicken. Furthermore, air chilling only leads to weight loss of less than 0.8% including free water on the surface of the chicken.

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Clean Air Chiller

Benefits:
- Shorter chilling times - Guaranteed deep muscle temperature
- Uniform and frost-free chilling
- Drip-loss less than 0.8%
Clean Air Chiller

Conceived and designed to meet ambitious and exact performance standards, the LINCO Clean Air Chiller represents an innovative approach to an important aspect of modern poultry processing. The system chills freshly slaughtered birds faster, more uniformly and without any parts frosted or frozen while safeguarding the highest level of hygiene. In addition, the Clean Air Chiller is an on-line system which allows fully automated non-stop operation on "first in - first out" principles with entry and exit via the LINCO Automatic Transfer Systems 520, with or without weighing.

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Specially designed nozzles

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