

Meat processing at Stajnbirt Mesarija, Slovenia



Güntner condenser S-GVH 047 A / 3 N (W): Low noise emission with optimum control and performance

Line of Business:	Industrial Refrigeration
Application:	Food Cooling, Meat Product Cooling
Country / City:	Slovenia / Skofja Loka
Fluid:	
Product:	Slimline unit cooler GDF, Wall/ceiling unit cooler GHN, Condenser GVH, Receiver GBH

The Stajnbirt Mesarija meat processing plant in Skofja Loka, Slovenia, celebrated a special topping-out ceremony in September 2005. A new meat cutting and production plant for processing extremely top-quality goods was built within six months. Güntner supplied the evaporators and condensers for energy-efficient refrigeration.

Extremely strict meat selection and processing standards apply at Stajnbirt Mesarija: “We only process goods from controlled production, the Slovenian origin of which has been guaranteed using the “open stable door” meat testing method,” emphasises master butcher Matjaz Miklavc, founder and managing director of Stajnbirt Mesarija. The meat processing plant’s new weekly capacity is about 2,110 kilograms of meat, i.e. 2 young cows, 2 calves and 15 pigs.

GDF and GHN evaporators

The new cutting and production plant has a total of 14 refrigeration points over an area of 125 square metres and also has a freezing tunnel, in which about 300 kg of meat are frozen every 10 hours. Each of the refrigeration stations is equipped with a Güntner model GDF evaporator with output of between 1 and 4 kW. A Güntner S-GHN evaporator with solenoid valve and an Elreha refrigeration station controller are used in the freezing tunnel. All heat exchangers have been selected using the Güntner Product Calculator GPC. In order to save energy and minimise weight loss during the storage of unpacked goods, an admission temperature of DT1 6 K was calculated for the refrigeration rooms. When the evaporators for the working rooms were selected, the company planned a low air circulation rate in order to provide good working conditions right from the start. All refrigeration stations are connected to a combination unit with a Frigopol separation hood compressor. The S-GVH condenser with output of 30 kW, speed-controlled fans and a suitable Güntner control system, including GBH liquid tank, was installed outside the processing rooms.



Draught-free working area cooling using the Güntner GDF evaporator

Efficient operation and quality assurance

An integrated heat reclaiming system ensures that Stajnbirt Mesarija operates extremely efficiently as far as energy saving is concerned. The heat that is generated by the compressors is transferred to the hot water supply using a heat removal system and stored. The thermal energy that is available per day is currently 522 kWh/d. Other advantages of the system are energy saving and noise minimisation by means of condenser ventilation with speed control and extremely efficient room insulation. In order to ensure that the system is monitored and logged at all times, the plant has an integrated remote data transfer facility.



Meat specialties from Stajnbirt Mesarija

After 15 months of operation, master butcher Matjaz Miklavc provides confirmation of the successful operation of the system: “We can already see that our operating costs are significantly lower. The high standard of the refrigeration equipment has made it possible to make significant improvements to the quality assurance of the fresh meat and our meat specialties.”

Univ. Dipl.-Ing. Djordji Jure Buble,
Güntner Slovenia



Matjaz Miklavc, founder and managing director of Stajnbirt Mesarija