

## One of the largest cold chain logistics providers in China "Guangdong Swire" selected Güntner NH<sub>3</sub> evaporators for its cold store



Guangdong Swire Cold Chain Logistics in Guangzhou, China

<b>Business area:</b>	Industrial refrigeration
<b>Application:</b>	Food cooling
<b>Country / City:</b>	China, Province Guangdong, Guangzhou
<b>Refrigerant:</b>	NH <sub>3</sub>
<b>Product:</b>	S-AGSN, floor-mounted NH <sub>3</sub> evaporator

**Guangdong Swire Cold Chain Logistics** is one of the most important cold chain logistics providers in China. The company was founded in June 2008 and is located at the strategically important position close to the South China Sea.

"Guangdong Swire" operates a logistics cold store with space for 24,000 pallets, this corresponds to a storage volume of 10,000 m<sup>3</sup>. A large range of different products are refrigerated in the cold store that require different storage temperatures: Fish, meat, frozen foods and dairy products, but also wine is cooled here. The cold store is divided into five sections, where the products are cooled at storage temperatures of +5 °C and -25 °C.

During the planning phase different concepts were discussed and the decision was made to use evaporators with ambient air defrost for the low temperature stores. Convinced by Güntner's high consultancy skills and technical solutions, "Guangdong Swire" selected for all sections of the cold store customized Güntner evaporators that were precisely adapted to the specific requirements of the cold store.

### The commissioning area

Ceiling-mounted Güntner ammonia evaporators were chosen for keeping the commissioning area at 5°C.

### Cold store with a storage temperature of -25 °C



Cold store with channels for refrigeration at -25 °C

For the cold store with a storage temperature of -25 °C "Guangdong Swire" selected S-AGSN floor-mounted ammonia evaporators. These floor-mounted coolers are installed outside the cold store in channels. Each channel is equipped with flaps that can be closed or opened according to the operating state. During refrigeration, the flaps are opened to let the cold air flow towards the cold room, the flaps towards the ambient air are closed. Cold air flows through the channels into the cold store, there it spreads and keeps a continuous temperature level in the cold store. This ensures that the quality of the refrigerated produce is maintained, even at high ambient temperatures, as they are often the case in Guangdong.



Floor-mounted coolers outside the cold store

For defrosting, the flaps towards the cold room are closed and the flaps towards the ambient air are opened. The coolers can consequently be de-

frosted by the warm ambient air, no extra defrost system is necessary. Defrosting is carried out with ambient air, no additional energy consumption or complex control systems are required, because in this geographic location ambient temperatures are always above 0°C. Another advantage of this energy-saving defrost system: Defrosting can be carried out very quickly, 5 to 8 minutes are sufficient.

### Reliable cooling for long-term operation

The customized solution by Güntner, combined with qualified and comprehensive consultancy, assures for "Guangdong Swire" reliable refrigeration for its cold store, thus ensuring its position as one of the leading cold chain logistics providers in China.