

SnowDrop Technology

Cold chain solution with dry ice for home delivery services



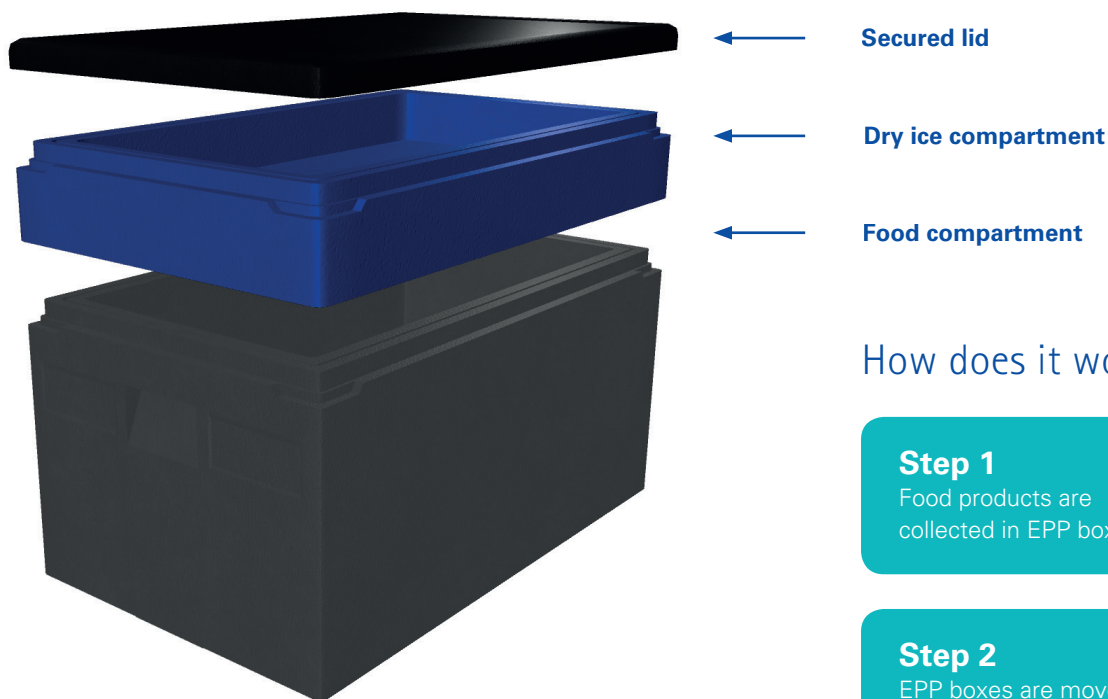
The number of food deliveries from supermarkets to customers' homes is growing. Consumers' lives are becoming more and more convenient: not only can they have books, clothes and shoes delivered to their doorstep but also food products.

The SnowDrop technology was developed by Olivo and Messer. It consists of an insulated EPP box having one compartment for food products and another one filled with dry ice. The box is equipped with its own automated filling unit which produces dry ice on demand. With two

different cooling lids it is able to manage two different temperature ranges: either for chilled or for frozen products. The duration of the transport can be up to 12 hours.

The main characteristics of the EPP box are:

- It is highly insulated, sturdy and very light.
- The dry ice is confined to the respective cooling lid.
- There are two lid versions available, for either frozen or fresh products.



The SnowDrop technology brings considerable benefits:

Savings

Onsite dry ice production is cheaper than buying dry ice and there is no more loss of cold energy due to dry ice storage.

Safety

The operator never handles dry ice. It is confined to the respective compartments which stay closed during transport and delivery.

Easy of use

Only a single cooling agent is required for chilled and frozen products and its automated dosing ensures a simple and effective working process.

Quality

Product temperature is perfectly maintained during transportation.

Eco-friendly deliveries

The CO₂ used usually comes from industrial processes and is recovered and recycled to be used again. The system causes no pollution and no noise.

How does it work?

Step 1

Food products are collected in EPP boxes.

Step 2

EPP boxes are moved to the SnowDrop station.

Step 3

Required amount of dry ice is dosed into the boxes' cooling lids.

Step 4

Filled lids are closed and secured.

Step 5

EPP boxes are ready to maintain the temperature and deliver the grocery to customers' homes.



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