CARG LITE**SEA** The innovative way to ship flowers by sea

The packaging challenge when sea-freighting flowers

Filling a reefer requires a particular attention to the airflow in the container.

The flow of cold air supplied from the floor of the container circulates upward through the boxes, then sucked back into the condenser unit that pushes cold air back into the floor to create a constant cycle of cold air.

It is therefore clear that the circulation of air through the boxes and the flowers is key to supply the required temperature to each and every box in the reefer.

The common method currently used to fill the container consists of skids tightly arranged on the reefer floor forming a dense mass that only allows the cold air to circulate through the very narrow spaces that are incidentally occurring in-between the boxes.

Better air flow

Each Cargolite SEA box is equipped with two external frames. When the boxes are laid on a skid, a space is formed between the boxes and allows for free circulation of cold air between the boxes. This way, each box is exposed to a better airflow and a uniform and much faster cooling of the entire volume of the reefer.

In comparison, with the dense packaging mode, air only flows around the mass of all the boxes and it may take several days to cool down the center of the mass. These several days may be crucial for the flowers and the vase life.

With the frames and the spaces between the boxes, the flowers are also cooled much faster at the farm making it easier to follow the pre-cooling requirements for seafreighting of flowers.

Better resilience to sea dynamics

Another challenge addressed by Cargolite SEA is the weakening of the carton.

It is a known fact that after several days under the weight of boxes on top, the carton loses up to 50% of its resilience to vertical load, a phenomenon known as "carton fatigue".

In addition, the constant dynamics applied on the boxes at sea, especially pitching and rolling, cause stress which further affects the box and increases the odds of yielding. This can result in damages to the flowers in the lower cartons and collapsing of the skid when offloaded from the container.

With the Cargolite system, the load is diverted to the frames. The carton and the flowers remain unaffected by the various forces applied to the carton during the trip.

Better packrates

Using Cargolite boxes has been proved over the years to contain more stems per volume and with much less packaging materials. The use of frames reduces the amount of paper used in the packaging process and reduces the carbon foot print by18%.

Cargolite sea, the ideal solution for sea-freighting flowers

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