



## 2.4

## Reefer container: Damage to various food products

The container vessel had loaded cargo in a European port, to be discharged in Asia. Several reefer containers with meat, fish and other food had been loaded. The containers had been filled with frozen food at a temperature of  $-20^{\circ}\text{C}$  and the temperature of the containers was set to freezing.

### Temperature logged

During the voyage an AB checked the containers twice a day and logged the temperature between  $-19^{\circ}\text{C}$  and  $-20^{\circ}\text{C}$ .

One month later the vessel discharged the containers in Asia. When the cargo receivers inspected the meat, they found it to be thawing.

### Actual conditions

According to the container units' records, the temperature in the containers had increased over a couple of days after departure from  $-15^{\circ}\text{C}$  to  $+5^{\circ}\text{C}$ . All the alarms for the containers had been disabled.

The airflow outlet to the containers had been open. This allowed a continuous flow of warm air into the containers. Why this had been opened after departure is not known.

The cargo was fully rejected and destroyed by the cargo receivers.

### Incorrect record keeping

The crew had not verified the correct temperature of the container but only written down what should have been the correct temperature in the log as the actual containers' digital log showed  $+5^{\circ}\text{C}$  and not  $-20^{\circ}\text{C}$  as in the vessel's log.

## What can we learn?

- A continuous supply of power to reefer containers is of the utmost importance during the voyage. The vessel's crew should regularly monitor this and ensure that all incidents regarding the vessel's diesel generators and reefer circuit breakers, and their associated alarm systems, are meticulously recorded.
- The crew should check that the container set temperature complies with the shipper's specified carriage instructions.
- The crew should keep clear and accurate records. Document each stage of the voyage from loading through to discharge as well as obtaining date-stamped photographs of incidents which occur during the voyage.
- When carrying frozen cargo, the fresh air ventilation ducts should always be closed.