

## Problems with Refrigerated Containers? – Perish the Thought

Greater care of equipment and attention to the accuracy of information pertaining to cargoes are crucial in avoiding damage to and loss of perishable goods in transit. TT Club's Claims Executive, Mike Yarwood outlines the key elements in managing risk and minimising claims when handling temperature-controlled commodities.

Temperature controlled cargoes are inherently perishable and present greater challenges and risk exposures for the logistics operator than ambient cargoes. As the world's specialised 'reefer ship' fleet declines it is predicted that containers will be utilised for up to 75% of all temperature controlled cargo shipments by next year. So the process of correctly packing, handling and monitoring refrigerated containers and their cargoes is one that will continue to demand attention. Whilst perishable cargo is often high paying freight, it can also give rise to high value exposures; a container of lobster, for instance, could hold a value in excess of £250,000, giving adequate incentive for extra care to be taken.

As a major insurer of this supply chain process TT Club has a vast experience in understanding how things can go wrong. We find that the majority of insurance claims involving perishable cargo occur due to:

- 1. Confusion over Celsius and Fahrenheit
- 2. Poor communication of requirements (plus versus minus temperatures)
- 3. The container not monitored or plugged in throughout its journey.

In the UK we've experienced cases where confectionary that should have been transported at  $+10^{\circ}$ C was delivered at  $-10^{\circ}$ C, reeking frozen fish a t  $+20^{\circ}$ C instead of  $-25^{\circ}$ C and animal carcasses at biting  $-22^{\circ}$ C rather than a cool  $+1^{\circ}$ C, all resulting in losses in excess of £50,000.

There are innumerable opportunities throughout a supply chain for such errors, which can be catastrophic in terms of the sound condition of the cargo. Often the simplest of errors result in high value claims from cargo owners. Foodstuffs especially are subject to stringent restrictions to ensure safety through the food chain. These will often dictate that even the smallest abuse in temperature can result in the refusal of cargo condemned as unfit for consumption.

For the logistics operator, it is vital to know your shipper when handling temperature controlled cargoes. In the first instance it is generally the responsibility of the shipper to provide specific instructions and requirements regarding the carriage of the cargo. It is increasingly the case, however, that this responsibility is passed to the logistics service provider, not least when full supply chain managed operations are undertaken. In these cases the forwarder assumes responsibility for the entire supply chain. Whatever the circumstance the logistics provider should actively seek advice, clarification and agreement from the shipper regarding such requirements, and contracts specifying these should be regularly checked, especially at renewal. It should also be noted that industry regulations -

and therefore carriage requirements - have the potential to change for perishable cargoes fairly regularly.

For the majority of cargoes, the shipper will normally declare a set temperature at which the cargo is to be maintained throughout the duration of the transit. For less sensitive chilled cargoes, a range of acceptable temperatures may be stipulated. In either case when subcontracting transport moves, whether short inter-depot transfers or global containerised movements, it is essential to ensure that clear and accurate written instructions are passed down the contractual chain. The margins for error are often very small, the difference between "—" and "+" temperature can be easily confused in communications and will likely have catastrophic effects on the cargo. Freezing an ambient cargo can be just as damaging as overheating a frozen cargo.

While the Centigrade scale is most widely used and recognised globally, the USA for example uses Fahrenheit. Adding to the confusion,  $0^{\circ}$ C is a widely recognised temperature setting for chilled cargoes, whilst  $0^{\circ}$ F is a widely recogn ised temperature setting for frozen cargoes. Again accurate communication is key to avoiding potential losses.

Once the shipping instructions have been made clear, the container needs to be functioning properly. Reefer equipment should be regularly inspected for conformity, especially prior to loading and such units should be serviced and maintained regularly. Visual checks for damage should also be carried out prior to packing. Damage to the internal vents, perhaps caused by previous poor stowage, can severely affect the efficiency of air flow through the transport unit, which in turn can result in the actual temperature never reaching the set point temperature.

It is also essential to check regularly that the data logger equipment is fully functional. As technology has developed in recent years, it is now possible to monitor this data remotely and even for warnings to be raised when temperatures fluctuate unexpectedly. However, such technology is of little value if the data logger itself is not operational.

Pre-packing checks and correct packing also play an important role. The transport unit should be in good condition, clean and free from odour. The cargo must be evenly distributed with due care taken to ensure a free flow of air and pallets stacked safely and securely. Crucially, cargo should be cooled to the desired carrying temperature prior to loading. The reefer unit is not intended to cool cargo down, merely to maintain the set point temperature. At TT Club we have found that cargo packed at elevated temperatures is one of the leading causes of cargo claims.

If things do go wrong, when dealing with temperature sensitive cargoes, time is of the essence. Timely intervention after an issue has been discovered can have a dramatic effect in mitigating a potential loss. Further, following discovery of an issue, appointing an expert to attend and assess a cargo which is alleged to have suffered temperature abuse can often result in at least a portion of the cargo being either accepted or saved by means of a salvage sale.

Key Points to take away:-

- 1. Know your shipper
- 2. Understand the correct requirements for the specific cargo being transported and verify them
- 3. Ensure accurate information is passed through the contractual chain.

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