

The Perils of Packing

Specialist freight insurer, TT Club is on a mission to heighten awareness of the dangerous consequences of improperly packed containers. In his article Peregrine Storrs-Fox, TT's Risk Management Director examines the issue in detail.

Effective cargo management is critical, whatever supply chain role is being undertaken. Thus, there should be great interest in the current debate in the container industry concerning incidents that damage both cargo and containers, as well as causing injuries and fatalities. The issues involve questions about what cargo is in the container, how much of it there is and how it is packed and secured.

Much industry attention recently has been focussed on the debate surrounding the degree to which inaccurate weights cause accidents including stack collapse, road and terminal vehicle overturning, crane failure or even contributing to ship loss.

However, the reality is that accurate weighing of containerised cargo is only a small part of safety in the supply chain. The way in which cargo is packed and secured in containers is arguably far more significant leading to loads shifting and cargo spillages. Accident investigations into cargo claims received by TT Club frequently identify poor load distribution, improperly packed cargo and inadequate blocking, bracing and securing, including inappropriate use of dunnage. Further evidence of the potential danger of unsafe packing and securing has been provided by a survey on behalf of the industry bodies, ILO/IMO/UNECE*, which is developing a Code of Practice for Packing Cargo Transport Units (CTU's, including trailers, swap bodies and railcars as well as containers). This confirmed that it is not weight per se, but inappropriately packed and secured cargo that is the major cause of such accidents.

TT Club's own claims experience shows that 65% of incidents involving loss or damage to cargo are thought to be caused by poor or improper packing and securing. This persistent statistic is echoed by the more granular figures from the ocean carriers' Cargo Information Notification System (CINS), where some 35% of incidents investigated were found to have been caused by poorly or incorrectly packed containers.

As would be expected, those who have researched the problem – amongst them consultants and the TT Club itself – have identified a variety of issues. For example, often those involved in packing CTUs struggle to get a heavy item in and then believe that it will never move in the unit during transit. Even where they consider it might move, they believe 'surely that 25 mm square batten nailed to the floor will stop it'. Additionally, many also

believe that placing the heavy load near the door will make it easier to get it out again, without thinking of the consequences of such weight distribution within the trailer or railcar.

There is inadequate awareness of the dynamic forces imposed on cargo during transit. In an attempt to make the nature of these forces more understandable, a domestic washing machine goes through about 6,000 movements in a typical wash cycle; in comparison a trans-Atlantic voyage on a container ship may put cargo through some 160,000 similar movements. In that context, it can be seen that ensuring cargo is properly secured is vital to its safe delivery.

There is also an element of 'out of sight, out of mind'. Once those who packed the container at origin close the doors, they are generally relinquished of all responsibility. The modern container passes through so many handling processes on its subsequent journey that it can be difficult to pinpoint liability for an incident even if poor packing is suspected. The consequences, however, are vast in terms of injury and loss of life as well as cargo damage and damage to other property.

The TT Club is not alone in promoting the need for 'best practice' guidelines for cargo packing procedures. For many years SOLAS (International convention for the Safety of Life at Sea) and the IMDG Code (International Maritime Dangerous Goods Code) have referenced the IMO/ILO/UN ECE 'Guidelines for Packing Cargo Transport Units (CTUs)' (1997) to assist those involved in packing containers and other transport units.

However, ILO research found that only 15% of packers use the guidelines. Indeed, the majority of respondents to the survey were unaware of the CTU Packing Guidelines. Subsequently the ILO's Global Dialogue Forum concluded that the existing guidelines should be updated and revised, and importantly formulated as a non-mandatory – but enforceable – Code of Practice. A Group of Experts was nominated by the three UN bodies, which has now totally restructured the guidance to cover the entire supply chain process and extended the detail of guidance provided. Comments made by IMO's Dangerous Goods, Solid Cargo and Containers sub-committee (DSC) in September 2013 will be considered at the final meeting of the Group of Experts In November. After that, it is expected that the draft code will be submitted to the governing bodies of each of the three UN entities for approval. The last of the three will be IMO's Maritime Safety Committee meeting in May 2014. Assuming approval, it is anticipated that administrations will be encouraged to adopt it in their national legislation.

Concurrently with this international activity, the TT Club commissioned Exis Technologies to develop 'CTUpack e-learning $^{\text{m}'}$, an online familiarisation and training tool for those involved in the packing and unpacking of containers and other CTUs. The objective of the course is to focus industry attention on the significant and dangerous implications of bad packing and

provide foundational guidance consistent with current good practice; it will be available during November 2013.

CTUpack e-learning[™] follows the well established IMDG Code e-learning training course from Exis, which is also sponsored by TT Club. Both courses are highly relevant to the risk management approach that the Club has always fostered within the global freight transport community. As in other operational sectors of the industry, training is clearly the number one loss prevention measure and, if adopted as a core feature of an operator's culture, can greatly reduce the number of incidents incurred globally each year throughout the industry.

So plenty of good work is being done but communication still remains the challenge. The ILO's research clearly found that the current packing guidelines are not generally reaching those who are actually packing CTUs and therefore recommended that its replacement should be readily available in a format that can be used by packers across the globe. IMO's DSC agreed that the CTU Packing Code should be structured in a user-friendly fashion and freely available on the web for ease of dissemination. The substantial investment over the last three years, drawing together this wealth of expertise to develop the CTU Packing Code, will only be worthwhile if effective global dissemination and use of the Code is achieved. The development of CTUpack e-learning™ represents what the TT Club hopes will be an important contribution to broad dissemination of sound information on good practice.

*International Labour Organization/International Maritime Organization/United Nations Economic Commission for Europe

ARTICLE TO BE PUBLISHED IN FREIGHT BUSINESS JOURNAL – 1ST NOVEMBER 2013