

General Cargo on Cellular Container Vessels



material when placed on deck during cargo operations.

Therefore when a container vessel is used for the carriage of a general cargo which may be susceptible to water damage, it has to be confirmed that the hatches are weathertight. All rubber packing must be in place, be in a good condition and form a continuous seal. Hatch coaming drain channels must be kept clear of debris and the coaming drains must be clear.



Introduction

It has recently become evident that cellular container vessels are increasingly being fixed for the carriage of general and project cargoes. For the reasons outlined in this Risk Alert, the carriage of general or project type cargo on vessels that are not specifically designed for this purpose represents a significant increase in risk, and any decision to accept such cargoes needs careful consideration. However, if cellular container vessels are to be used for this purpose a number of areas require attention in order to minimise the risk of P&I claims arising. The areas of concern that need to be considered and addressed are detailed below for Members' guidance.

securing manual will need to be amended and approved by Class or the entity that approves the Cargo Securing Manual on behalf of the Flag State.

Hatchcover Weathertightness

One of the principal causes of cargo damage claims experienced by the Club is water ingress into cargo holds caused by non-weathertight hatchcovers.

It is generally accepted that the hatchcovers on container vessels are not expected to be as weathertight as would be the case for a general cargo vessel due to the lower risk of damage to containerised cargo from water entering the holds in heavy weather. For container vessels it is also found that the rubber packing retaining channels on their pontoon hatch covers are susceptible to damage during opening and closing. The rubber packing is also especially susceptible to damage when pontoons are in contact with fittings and lashing



Cargo Securing Manual

It has to be ensured that the vessel's Cargo Securing Manual covers all aspects of the carriage of general and / or project cargoes that may be applicable to the anticipated fixture. If not the cargo

Hatch securing devices must be in place, serviceable, properly adjusted and must all be correctly applied prior to departure. When hatches are found not to be weathertight, then additional precautionary measures such as foam sealant and hatch cover tape should be utilised and adequate stocks maintained onboard for this purpose.

Hatch and Tank Top Loadings

Cellular container vessels, by their nature, are designed such that the cargo weight loadings on the hatches are applied to the hatch shoes or twistlock fittings, and in the holds on the plates at the base of each cell guide. Therefore when loading a general cargo either on deck or on the tanktop the maximum allowable load per square metre must not be exceeded.

Securing Points

The decks of container vessels are provided with numerous securing points which can be utilised when stowing general cargo, however, it must be verified that the calculated loads in the lashings do not exceed the Maximum Securing Load (MSL) of the securing point.

In the hold it may be necessary for padeyes and / or 'D' rings to be welded to the tanktop or hold bulkheads to facilitate cargo securing. Care needs to be exercised to ensure that welding is not attempted on bunker tank surfaces, and best practice dictates that these areas should be identified and permanently marked in a suitable manner.

Securing points with an adequate MSL need to be welded to suitable strong points, and all fillet welds should be subject to either dye penetrant or magnetic particle inspection non-



destructive testing (NDT). Any welds that fail NDT are to be ground out and re-welded prior to re-testing by NDT. Where cell guide structures and supporting brackets are to be used as lashing points, it must be verified that these are suitable to withstand the dynamic loads expected in the lashings.

Lashings and Seafastenings

As cellular container vessels do not normally carry lashing material suitable for use with general cargo, appropriate material will need to be provided onboard. All lashing material, be it shackles, turnbuckles, nylon ratchet load binders, ropes or wires must be certified, with a suitable MSL and supplied in sufficient quantities.

Stowage

In the cargo holds, achieving a tight cargo stow will be difficult due to the presence of the cell guides and other obstructions. Dunnage may well have to be used to build a level platform over hold fittings and should also be used to tom and shore the cargo in conjunction with the lashings to ensure the cargo stow is as tight as possible around the obstructions in the holds.

Crew Experience

It may be the case that the deck officers onboard are unfamiliar with the stowage, securing and carriage of general cargo or project cargoes.

If this is the case the appointment of a suitably experienced surveyor is recommended to protect the Member's interests. In some cases the nature of project cargo may be such that cargo underwriters may require that an independent approved Marine Warranty Surveyor be used to ensure that the cargo is loaded, secured and shipped in accordance with the agreed procedures and in line with industry best practice.

In contrast to containerised cargo, the same degree of liberty to carry cargo on deck will not apply in the case of general cargo and bills of lading will need to be

claused to reflect on-deck carriage. In addition, any exceptions to the apparent good order and condition of the cargo must be reflected in the mates' receipts and bills of lading.

Stability

Container vessels, by their nature, are designed to carry cargo from their tanktop to the underside of the hatches and several tiers of containers on deck. The hull form of the vessel is therefore designed such that the vessel will have adequate stability for all anticipated loading conditions with the cargo weight spread from the tanktop to high on the deck. When general cargo is carried the weight of the cargo will inevitably be concentrated in the lower portion of the cargo holds, and also just above the hatches if deck cargo is included. The result may be a lower than normal centre of gravity, and hence a larger metacentric height (GM) than would be experienced when loading a homogeneous container cargo. With the larger GM the vessel will have greater residual stability than usual and may be quite "stiff" with a short period of roll. Therefore when planning the cargo stow and the ballasting plan it should be ensured that upon departure the vessel is not unduly stiff and hence likely to generate excessive forces on the cargo and its lashings.

When planning the stowage and securing of general cargo or project cargo on a cellular container vessel the guidance contained in the latest edition of the International Maritime Organisation publication Code of Safe Practice for Cargo Stowage and Securing and the vessel's own Cargo Securing Manual should be followed.

For further information on this or other Loss Prevention topics please contact the Loss Prevention Department, Steamship Insurance Management Services Ltd.

Tel: +44 20 7247 5490
Email: loss.prevention@simsl.com