



IMO

SUB-COMMITTEE ON STABILITY AND
LOAD LINES AND ON FISHING
VESSELS SAFETY - 36th session
Agenda item 12

OPEN-TOP CONTAINER SHIPS

Interpretation of the 1969 International Convention on
Tonnage Measurement of Ships

Submitted by Germany

1 A working group of tonnage experts discussed at MSC 58 questions of measurement of open-top container ships, a novel type of craft, as well as dock ships and livestock carriers. As far as open-top container ships are concerned, a new interpretation has been settled (TM.5/Circ.3). No solution could be found for the dock ships, because the open-top cargo compartment might be an enclosed space or an excluded one, depending on the construction of the ship or on the interpretation of "other means for securing cargo" - MSC 58/WP.7. Therefore it is necessary to agree on a unified measurement of dock ships and to clarify the question, when open cargo spaces should be considered as enclosed spaces.

2 Dock ships (figure 4) are different from open-top container ships (figure 5). This novel craft includes in its main structural characteristics the absence of an upper deck and hatch covers, but having a dock deck above the moulded draught together with side erections. It might or might not have a stern door. If the open cargo space has hatch covers, the space must be included (figure 3). If the cargo space is fitted with f.i. container guides, which may be considered as "other means for securing cargo", the space must be included, independently of the fact whether hatch covers are available or not. If the cargo space has no container supports and if the high side erections have openings, it might be an excluded space. This would mean that the tonnages of two ships of the same size - for the same service - would depend on whether the open cargo space is fitted with container guides or not, whether hatch covers are available or not, or whether side openings have grilles or not. The former problem concerning open/closed shelter decker would thus rise again.

3 Considering regulation 2(4) - enclosed spaces - paragraph 2:

"No break in a deck, nor any opening in the ship's hull, in a deck or in a covering of a space, or in the partitions or bulkheads of a space, nor the absence of a partition or bulkhead, shall preclude a space from being included in the enclosed space."

We propose to examine whether all cargo spaces on dock ships should basically be included in gross tonnage.

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4 We must remind that the Suez and Panama Canal Regulations, based on experiences about "open" spaces (excluded spaces), stipulate:

- (a) excluded spaces must be empty,
- (b) if cargo has been loaded, such space must be included.

Deckloads on open deck only are not included in measurement (figure 2).

5 Options

- .1 Spaces situated above the upper deck and which can be loaded with cargo should be considered as enclosed spaces according to regulation 2(4) - even if the deck above or parts of that deck are missing or if side erections are partly open.
- .2 Stern doors as well as grilles in side openings or any kind of lashing as container guides, bottom foundations, lashing points (figure 2) in such cargo space are "other means for securing cargo" according to regulation 2(5).
- .3 Locally limited wash bulkheads - within 0.2 L at the foreship are not to be considered as "other means for securing cargo".
- .4 If the upper deck is partly or completely missing and if additionally one of the boundary walls is completely missing, the space is not to be considered as an enclosed space according to regulation 2(4).

6 Furthermore a decision should be taken about the definition of steps in the upper deck and how to deal with them in the case of open-top container ships. It would be convenient to follow one of the load line interpretations (LL 48), in order to ensure a unified interpretation for load line as well as for tonnage.

7 Proposal

- .1 If the upper deck is stepped, the Load Line Interpretation No.48 should be applied.
- .2 In ships without a complete upper deck - regulation 2(1) - the moulded depth is the vertical distance measured from the top of the keel to the underside of the uppermost partial deck or stringer beside the hatch coaming, notwithstanding openings in the sides as freeing ports, etc. Where such uppermost partial deck is stepped, the moulded depth shall be measured to a line of reference extending from the lower part of that partial deck along a line parallel with the raised part - notwithstanding the inclusion of the total cargo compartment in gross tonnage (TM.5/Circ.3) (see figures 11 and 12).
- .3 Steps situated outside the "length" according to article 2 8 should not be considered.

8 Germany recommends a working group to discuss all necessary amendments to TM.5 circulars.

Enclosed spaces	Reg. 2 (4)
Cargo spaces (CC)	Reg. 2 (7)
Spaces open to the sea	Reg. 6 (3)

Fig. 1
(TM5/Circ 1)
Dredger Barge

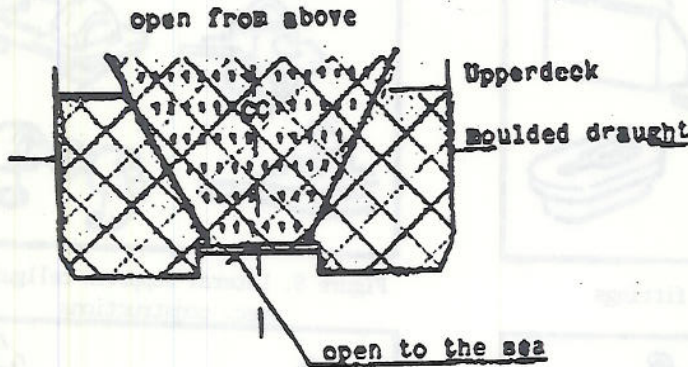


Fig. 2
Decked Prahu

open from above

. Deck Cargo .
. on upper deck .

Stations

- excluded -

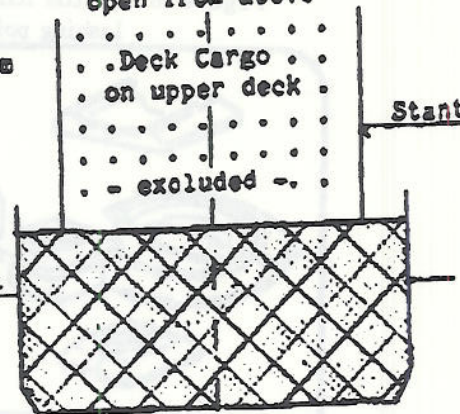


Fig. 3

with hatchcover

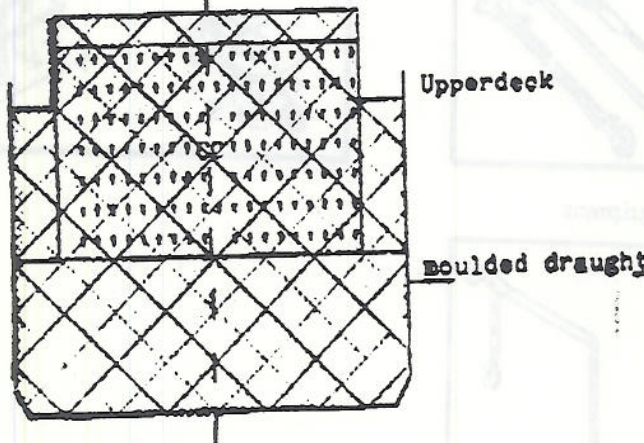


Fig. 4

Dockship

open from above

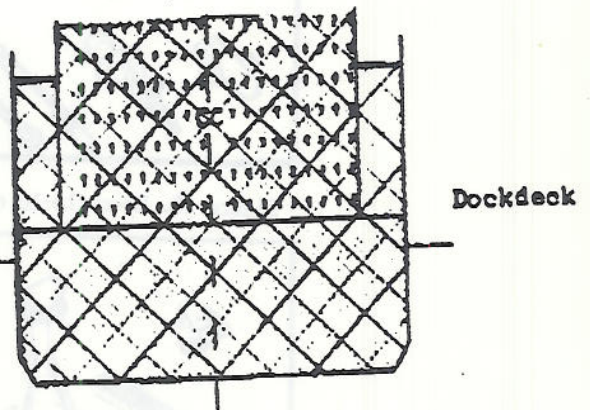


Fig. 5

open-top
Containership

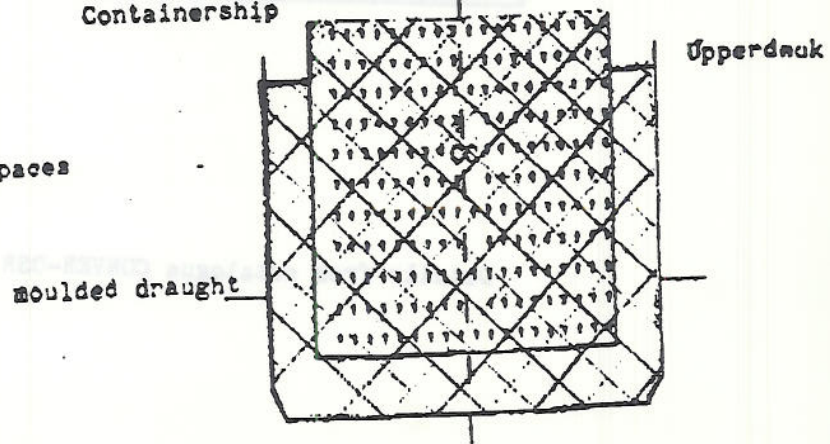
open from above



CC = V_c included



enclosed spaces



Means for securing cargo
Details of Lashing Equipment

Figure 6. Bottom foundations and lashing points

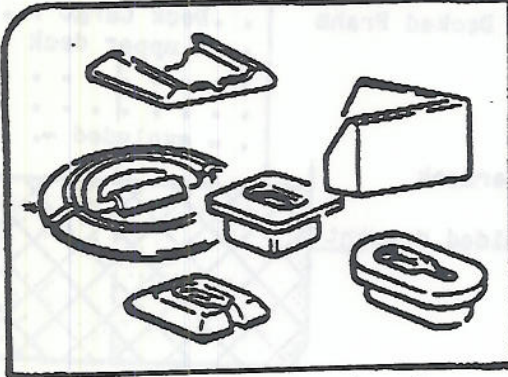


Figure 7. Intermediate & bottom stackers twistlock, bridge fittings

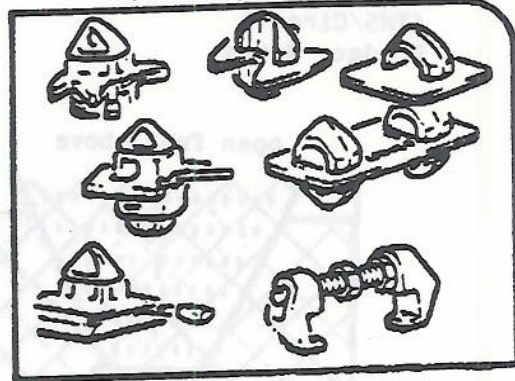


Figure 8. Lashing units & fittings

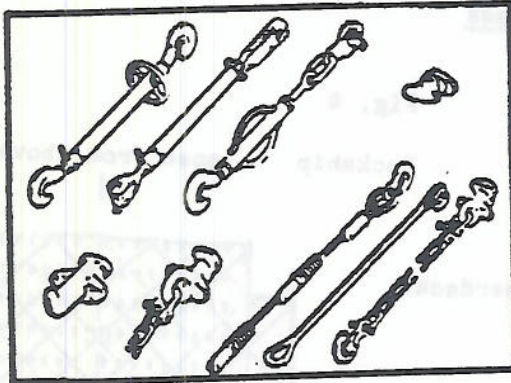


Figure 9. Lateral supports cellguides/spec. constructions

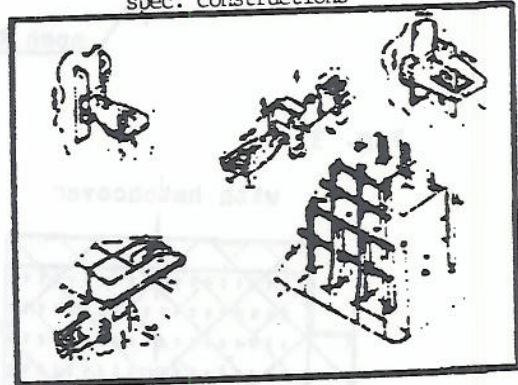


Figure 10. Ro-ro/lo-lo equipment

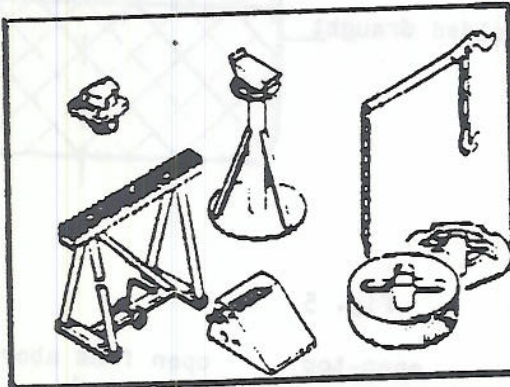


Figure 11

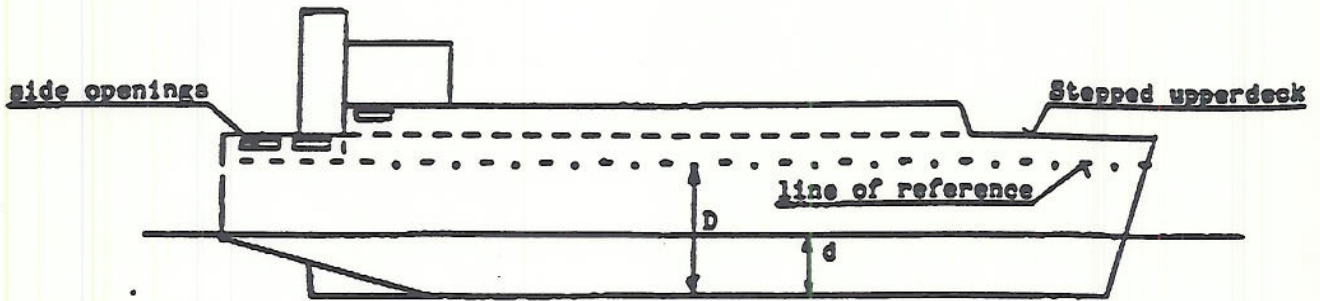


Figure 12

