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AMC NEWS Nov. 2015/TECH/32

New Panama Canal Mooring Modifications: AMC Completes the Necessary Technical Documentation for 200 Vessels

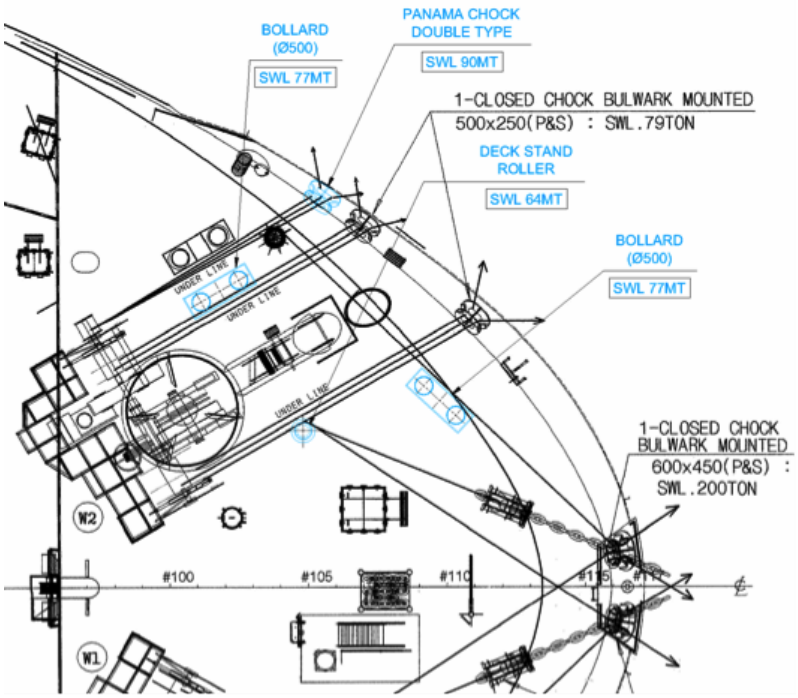
BACKGROUND

With the Panama Canal's new set of locks already open, shipping trades are affected since vessels up to 180,000 DWT will now be able to transit the newly expanded Canal:

	Existing Panamax	New Panamax
Length	294.13 m	366.00 m
Beam	32.31 m	49.00 m
Draft (TFW)	**12.04 m**	**15.20 m**
TEU	abt. 5,000	abt. 13,000

This will mean not only that vessels which could not pass through the old locks will now be able to transit the Canal (e.g. Capesize Bulk Carriers and Suezmax Tankers), but also that existing vessels which passed with reduced draft will now be able to take advantage of the 3.16 m additional draft allowance of the new locks; see below example for a **Kamsarmax Bulk Carrier**:

	Existing Locks	New Locks
Draft (TFW)	12.04 m	14.40 m (<15.20 m)
Draft (TFW) diff.	-	2.36 m
DWT	63,700 MT	82,200 MT (full DWT)
DWT diff.	-	**18,500 MT (add. cargo)**



PROJECT OUTLINE

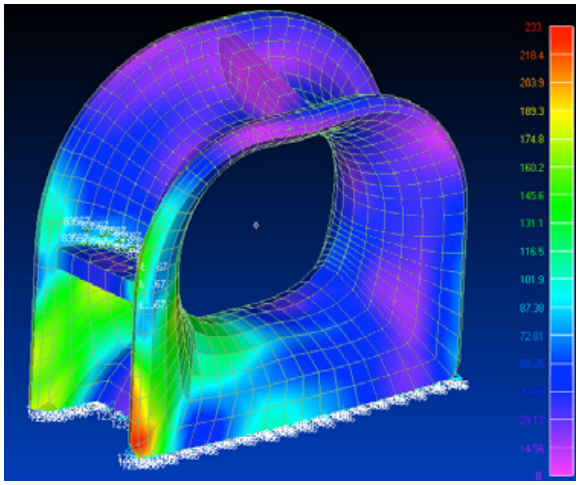
AMC has already prepared the necessary technical documentation required for compliance with the new Panama Canal requirements (ACP OP Notice to Shipping N-1-2016) for more than **200 vessels** (Bulk Carriers, Tankers, Container Vessels, LNG / LPG Carriers, etc.).

The experience gained through all these projects allows AMC to **optimize the design** in terms of a) number / location of additional fittings required (e.g. avoid new fittings over fuel tanks, reducing required staging, etc.) and b) required under-deck reinforcements (for minimum added steel weight). Each such project is typically split into the following phases:

1. Preparation of draft, updated Mooring Arrangement Plan in accordance with applicable requirements and submission to Panama Canal Authorities for approval.

2. Review / preparation of necessary drawings as per ACP N-1-2016 requirements for determining each vessels' compliance. To this effect, the pilot boarding facilities, pilot shelters, blue steering lights, navigational instruments locations, minimum laden / ballast drafts, etc. are checked so that approval may be granted from ACP.

3. Upon receipt of approval from ACP, preparation of strength calculations as per applicable Class requirements to determine the necessary under-deck reinforcements i.w.o. new mooring / towing fittings, preparation of relevant structural drawings for Class approval.



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