

T. S. S. "JUAN SEBASTIAN ELCANO".

SOCIEDAD ESPANOLA DE CONSTRUCCION NAVAL NO.21.

100 Al "Shelter Deck with Freeboard" contemplated.

Moulded Dimensions: 459.75' x 55.98' x 31.99' to Shel.Dk.

General arrangements, Lines plan and Flooding curves and calculations have been forwarded by the Bilbao Surveyors for a designed moulded draft of 24 ft. with a view to compliance with the Board of Trade Instructions relating to the construction of passenger steamships for vessels of the "mixed" type.

It is concluded the Owners and Builders desire this vessel to comply with the Board of Trade Instructions, but it might be pointed out that as this vessel is intended for Spanish Owners, the Passenger Certificate issued by the Spanish authorities is accepted by the Board of Trade, and the Board's Instructions are not compulsorily applied to foreign vessels.

If, however, it is intended to comply with these Instructions, it is submitted the Surveyors be informed that provided the vessel be built in accordance with the plans forwarded, the particulars and dimensions now supplied be verified on completion, fireproof bulkheads be fitted in the erections above the bulkhead deck as required by the regulations, all the regulations regarding watertight doors in bulkheads, sidelights, scuppers, discharges and openings in ship's sides and escape hatches from all watertight compartments be complied with, and provided there are no scuppers or other openings in the ship's sides to affect the position of the load line disc, an approximate summer freeboard of 8'-5" from statutory deck line  $1\frac{1}{2}$ " above wood shelter deck at side, corresponding to the moulded draft of 24 feet desired by the Builders, could be approved.

The above freeboard has been computed from the under deck tonnage as given by the Surveyor and from the sheers as measured from the lines plan. In view of the block coefficient being .73 it would appear however that the under deck tonnage (which gives a coefficient of .70) is too small,



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and assuming that the tonnage coefficient is at least equal to the block coefficient, it will be necessary to increase the mean end sheer to 72 inches, and to make the sheer of the gradual character as required by the freeboard regulations.

The Surveyors should also be informed that it is assumed that the bulkhead shown on Frame 83 is watertight, and that the inner bottom plating in way of cofferdams at bulkheads 83 and 117 is intact and watertight, but they should confirm this. A plan with figured dimensions showing position of scuppers, sidelights, openings in ship's sides, and other overboard discharges should be submitted for approval, also a sketch showing details of under-water sidelights and locking arrangements. For final assignment of load line a verified tracing of the lines plan (which should be rolled up and not folded) together with a verified General Arrangement Plan showing details of accommodation and giving figured dimensions for the lengths of all compartments should be forwarded.

Two sets of the plans forwarded should be returned to the Surveyors, and one set retained. No amendments have been made to the Flooding Calculation or curves, as an independent calculation has been made in this Office, and a copy of this should be forwarded for the Surveyors' guidance. It should be pointed out that as the sheers do not appear to be of the standard character the margin line at the stern and stem has been lowered as required in the Instructions. The Surveyors should report the sheers forward and aft at  $\frac{1}{4}$  length and  $\frac{3}{8}$  length from midships. The permeability of the tween decks above No.4 hold has been taken at 60% on the assumption that only stores are carried in this space; the surveyors should confirm that this is correct. The permeability of the tunnels and tunnel recesses has been taken at 95%.

The Surveyor should see that all the requirements of the Board of Trade Instructions relating to the Construction of Passenger Steamers are complied with, and on completion he should report in full detail accordingly, and should forward full particulars on form 11b for freeboard assignment.

to be forwarded for Surveyors' information.