

s/s Susanne. Ex. Fylingdale.

Deeptanks for storage of fuel oil for ships use.  
Skantlings calculations of the new steel structure.  
Dimensions of bulkhead plating, stiffeners, girder and  
brackets are taken from the rules of Lloyds Register  
of Shipping as follows:

I: Bulkhead plating.

Total height = 25'7"

The depth is 25'7" - 3'3" = 22'4".

In table 32, column 24 we read: .34 with normal spacing  
= 24". The spacing in our drawing is 33", which differs  
from the ordinary = 9". Correction for spacing of stiffener  
(clause 2) is  $3\% \cdot 9" = 27\% \cdot 34 = .091$ . Thickness of plating  
is then  $.34 + .09 = .43$ .

The lowest strake is  $43 + .04 = .47$ .

II.

Stiffeners.

From table 40, when spacing is normal and length of stiffeners  
is 6'7" and head  $H = 18'10"$  we get bulb angles 6".3".47  
with modulus 8.68.

When the spacing again differs from 24", we take a correction  
for the modulus,  $8.68 : 24" = X : 33"$ .  $X = 11.9$ , and stiffener  
7".3".48. We prefer bulb plate 6".50.

III.

Horizontal girder.

When two strongbeams are fitted in the tank we have now  
the maximum span  $S = 8'3"$

Table 41, page 150 we have the formula  $s = \frac{.d \cdot H}{100} = N$ .  
 $\frac{8 \cdot 25 \cdot 6 \cdot 59 \cdot 15 \cdot 4}{100} = 69$ .

The girder is in general = 14".34 and for end bulkheads  
12".34 and along outside we take 16".34.

The faceplates are resp.

IV.

End brackets of stiffeners are: 21" x 15" x 39"

continued.



V.

Strongbeams.

Channels of 6".<sup>.37</sup> bracketed to stiffener and girder  
with a maximum span of 3 framespaces = 3.33" = 8<sup>1</sup>/<sub>3</sub>".

See drawing section X-X .



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