

L. Smit + Zoon's Yard no. 889.

^{Engs.}
M.V. "OCEAN" building by Messrs. J. & K. Smit, Kinderdijk.

Vulcan hydraulic couplings and reduction gear No. K.165 by
Messrs. Deschimag "Weser", Bremen.

IT IS SUBMITTED that with two 4 SCSA heavy oil engines for main propelling purposes, each engine having 6 cylinders, diameter 365 mm. by 550 mm. stroke, ^{and} developing 650 BHP at 300 RPM, connected through two Vulcan hydraulic couplings and single reduction gearing to one line of intermediate shafting running at 115 RPM and transmitting a maximum S.H.P. of 1240, the following sizes of shafting merit approval, viz:-

Hydraulic coupling	230 mm.
Pinion	250 mm. with 140 mm. central hole.
Main wheel	250 mm. reduced to 240 mm. aft of bearing.

The plan showing arrangement and details of ^{as shown & amended} couplings and gearing ^{couplings & gearing} also merits approval, provided they be constructed under the usual conditions of survey and testing.

It is concluded that the Standard Steel 42.11 mentioned in the Surveyors' letter, of which are made the primary shafts "A" and the wheel shaft "B" on the plan, will have a tensile strength of 28-32 tons per square inch, the sum of the tensile strength and percentage of elongation on the Society's Standard Test Piece being not less than 57, but this should be confirmed.

It is noted that the pinion shafts "C" on the plan will be made from steel having a tensile strength of 65-70 Kgs. per sq. mm. with an elongation of 18% on a gauge length of 10 diameters, and this is in order.

Return plan.
Retain copy.

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