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Lloyd's Register of Shipping.

71, Fenchurch Street, E.C.3.

Enclosures.

5th April, 1957.

Dear Sirs,

E.

Messrs. Swan, Hunter & Wigham Richardson's
Yard Nos. 1580 and 1582.

I duly received your letter of the 25th ultimo, with enclosed plans, relating to Boilers and Shafting proposed in connexion with the above vessels, and with regard thereto I have to inform you that the plan of Main Boilers will be approved for a working pressure of 210 lb. per square inch, provided two of the screw stays passing through the lower butt straps be omitted as now indicated on the plan, and the boilers be constructed under the usual conditions of survey and testing.

The Steel Testing Surveyors should be advised regarding the tensile strength of the shell plates and butt straps, viz:- 30/34 tons per square inch.

With reference to the plans of shafting, I have to inform you that, with Triple Expansion Steam Reciprocating engines for open sea service, having cylinders 19 $\frac{1}{2}$ " , 33" and 54" diameter by 36" stroke, working pressure 210 lb. per square inch, working in conjunction with an exhaust steam turbine on the Bauer-Wach system, developing

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a combined equivalent IHP of 2200, consisting of 1475 IHP and 725 equivalent IHP developed by the reciprocating engines and turbine respectively, revolutions per minute of the propeller 115, diameter of the propeller 13 ft. 3 ins., and screw shaft with continuous liner, the following sizes of shafting will be approved, viz:-

Crank	10.75".
Intermediate	10.4375".
Screw	12.125".

The plans showing details of the shafting will also be approved, provided the diameter of the screwshaft at the forward end be not less than 11.4".

It is also concluded that these vessels are to have the notation "Strengthened for Navigation in Ice", as in the case of the Builders' Yard No. 1444, and that the propellers will be of cast steel or other approved material in accordance with the requirements of the Rules.

It is also concluded that the engine particulars are precisely as stated above, but I shall be glad if you will confirm this.

Two sets of the plans are returned herewith.

I am, Dear Sirs,
Yours faithfully,

The Surveyors,
NEWCASTLE-ON-TYNE.

Lloyd's Register
Foundation
Secretary.