

Steam Engine Shafting Endorsement.

Shipbuilders: Messrs. *Frederichsøed mch København* Yard No. *287 & 289.*

Engineers: Messrs. " Engine No.

It is submitted that with Steam Reciprocating Engines having particulars as stated below, the following sizes of shafting merit approval, viz.:

Sizes of Shafting:

Crank *318 mm pins* Thrust *315 mm* Intermediate *298 mm*  
*315 mm Journals*  
 Tube Screw *346 mm*

Particulars of Engines:

Engine Type *4 cyl<sup>2</sup> compound* Diam. of Propeller *4500*  
 Ocean Going Service Screw { With Continuous Liner  
 River Service Shaft { Without  
 Diam. of Cylinders *2HP - 425 mm*  
*2LP - 1015 mm*  
 Stroke *930 mm*

Working Pressure *15.5 kg/cm<sup>2</sup>*

The plans showing the details of the shafting also merit approval provided the dia<sup>2</sup> of the screw shaft at the forward end be not less than 327 mm. It is concluded that the dia<sup>2</sup> of the HP cylinders will be 425 mm as shown on the plan of crankshaft & not 415 mm as shown on the plan of straight shafting but this should be confirmed.

It is noted that these vessels are intended to be classed "Strengthened Return Plan 3 for Navigation in Ice" & it is concluded that the propellers will be made of cast steel or other approved material but this should be confirmed.

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1m, 9.30.

*The boiler plan is retained pending further information mentioned in Surveyor's letter of 5<sup>th</sup> inst.*

*J.P.P.*  
*8/3/37*