

MAIN PROPELLING OIL ENGINES.

W174-0126

E1.

Shafting Endorsement.

Shipbuilders: Messrs. *Swan Hunter & W.R.* Yard No. *1567*
Engineers: Messrs. " " " Engine No. *1606*

It is submitted that with engines for main propelling purposes, having particulars as stated below, the following size of shafting merit approval, viz.:

Sizes of Shafting:

Centre plus 450mm with 150mm central hole
side pins 450mm. Crank Flywheel Thrust *450mm.*
Intermediate *13 3/4"* Tube Screw *15 1/4"*

Particulars of Engines:

Engine Type <i>Doxford opposed piston</i>	Max. Press. in Cylinders <i>680 lb./sq"</i>
Open Sea Service	M.I.P. or M.E.P. <i>84-85 lb./sq"</i>
Smooth Water Service	I.H.P. or B.H.P. <i>2800</i>
No. of Cylinders <i>4</i>	Weight of Flywheel <i>FOR - 2.2 TONS</i>
Diam. of Cylinders <i>600MM</i>	Diam. of Flywheel <i>AFT - 3 TONS</i>
Stroke <i>LOWER 1340mm</i>	<i>FOR - 2450MM</i>
<i>UPPER 980mm.</i>	<i>AFT - 2050MM</i>
Span of Bearings <i>1200mm</i>	GD ² of Balance Weights
<i>Centre of Side Rods</i>	GD ² of Turning Wheel
Revs. per Min. <i>95</i>	Diam. of Propeller <i>15'-6"</i>

Screw Shaft Without Continuous Liner

The plans showing details of shafting and stern tube also merit approval. It is noted that daniel pins will not be fitted and the details of the yield point of the crankpins material and the proposed shrinkage allowance as stated on the data sheet are in order.

The minimum sizes of crankpins & journals that could be approved for ~~these~~ engines having the above particulars are :-

Return Plan . *6*

Retain Copy. *3*

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Crankpins *445mm (solid shaft)*

side crankpins & journals *439mm.*

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