

AUXILIARY OIL ENGINE Shafting Endorsement.

W192-0271

E 2.

Shipbuilders: Messrs. *W. Hamilton & Co.*  
*Bartram & Sons*

Yard No. *439-40-41-6*  
~~Yard No. 284-5~~  
Engine No.

Engineers: Messrs. *Russell Newbery & Co.*

It is submitted that with engines for driving auxiliary machinery, having particulars as stated below, the following size of crank shaft merits approval, viz.:

*Pins 2 3/8"*  
*Journals 2 1/2"*

Particulars of Engines:

Engine Type *4SCSA*

Max. Press. in Cylinders *900 lbs/sq"*

No. of Cylinders *2*

M.I.P. or ~~M.E.P.~~ *107 lbs/sq"*

Diam. of Cylinders *4 1/2"*

~~I.H.P.~~ or B.H.P. *16.*

Stroke *6"*

Revs. per Min. *1000*

Span of Bearings *5 1/8"*

The plan showing details of the crankshaft also merits approval, provided the breadth of the crank webs be not less than  $3\frac{1}{2}"$ , it being noted that the minimum tensile strength proposed for the material is  $38 \text{ tons/sq"}^*$

It should be pointed out that the dimensions of the crankshaft have been calculated for a span of bearings of  $5\frac{1}{8}"$  and not  $4\frac{3}{4}"$  as stated on data sheet. Further, if the maximum pressure in the cylinders, the M.I.P. and the minimum tensile strength of the material of the crankshaft correspond to those proposed in the case of the engine intended for Messrs. Harter Ltd (Petrol carrying barge)

Return Plan

Retain/Copy.

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viz-  $850 \text{ lbs/sq"}^*$ ,  $105 \text{ lbs/sq"}^*$  and  $41.2 \text{ tons/sq"}^*$  respectively, the breadth of the crank webs as now proposed viz  $3\frac{1}{4}"$  could be accepted

*27/10*

*26/10/39.*