

LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

ENGINEER'S CERTIFICATE.

The following is a true Account of the Particulars of the Machinery and Boilers:—

ENGINES.—Here state description of Engines, whether Direct Acting or Geared, Inverted, Horizontal, Diagonal, or Oscillating Cylinders
No. of Cylinders, &c.

Compound direct acting inverted surface condensing engines with two cylinders

ENGINES, maker of	<i>Denny & Coy</i>	Bilge Pumps, No. (<i>2</i>) and size	<i>1 1/2" diam. 24" stroke</i>
„ age of	<i>new</i>	Feed „ No. (<i>2</i>) and size	<i>1" diam. 24" stroke</i>
„ last time taken out	_____	Spare gear, if usual quantity on board Vessel	<i>Yes</i>
„ present condition	_____	Fuel, where stowed	<i>at side of engine room between engine & boiler rooms - forward of boiler room</i>
Diameter of Cylinder	<i>47" & 32"</i>	„ space between Coal Bunkers and Boilers	<i>6"</i>
Length of stroke	<i>48"</i>	„ for what quantity is space provided	<i>576 tons</i>
No. per minute of Engines	_____	Donkey Engine and Boiler	_____
„ of Screw	_____	„ if fitted in Engine Room or on Deck	<i>Engine in engine room - boiler on deck</i>
<i>H.P.</i> Estimated power	<i>400</i>	„ can pump be worked by hand	<i>No.</i>
<i>H.P.</i> Effective power	<i>2000</i>	„ size of pump (<i>5"</i>) and stroke	<i>10"</i>
Diameter of Screw (or Paddle Wheels)	<i>16" & 5"</i>	„ is hose of sufficient length to reach every part of the Vessel	<i>Yes</i>
Pitch of Screw	<i>22" & 0"</i>	No. (<i>1</i>) and continuation of hand pumps, if fitted in Engine Room	<i>Yes</i>
No. of Blades (or Paddles)	<i>Four</i>		
Description of Screw (or Paddles)	<i>Four cast iron shaped blades</i>		
Holding down Bolts, size	<i>1 1/2"</i>		
„ present condition	_____		

BOILER.—Here state description of Boiler, and No.; if Tubular, or Flues; No. of Furnaces; if fitted with superheating apparatus; if Fired athwartships, or from fore, or after end of Boiler, &c.

Four cylindrical tubular boilers with three furnaces in each - fired athwartship, fitted with a superheater

BOILER, maker of	<i>Denny & Coy</i>	Can each Boiler be used separately	<i>Yes</i>
„ age of	<i>new</i>	What clear space between top of Boiler and woodwork	<i>5" & 0"</i>
„ when last taken out	_____	What clear space between Funnel and woodwork	<i>2" & 6"</i>
„ present condition	_____	Are Engine and Boiler Keelsons well connected fore and aft	<i>Yes</i>
„ working pressure	<i>65 lbs.</i>		
No. of surface Blow off Cocks to each Boiler	<i>One</i>		
SCREW SHAFT length	<i>26" & 0"</i> diameter	Tunnel thickness of plating	<i>3/8"</i> height <i>6" & 0"</i>
width	<i>4" & 8"</i> if water-tight door on Engine Bulkhead.		<i>Yes</i>

Port *Dumbarton* *6th* day of *August* 1875

We hereby certify, that the whole of the above Machinery and Boilers of the Iron (or Wood) Screw (or Paddle) Steam Vessel "*Merkara*" belonging to *Mr Mackinnon & Co* whereof *James Ballantyne* is Master, *1950* Tons Register, and *400* H.P. have been carefully inspected and examined by us at *Dumbarton* and we found the same, at this date, in good order and safe working condition.

Denny & Coy

Marine Engineers.



Lloyd's Register Foundation

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