

# 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 surface condensing.  
Two Cylinders jacketed.*

ENGINES, maker of *Blackwood & Gordon*  
 „ age of *new*  
 „ last time taken out  
 „ present condition *good*  
 Diameter of Cylinder *25" x 44"*  
 Length of stroke *30"*  
 No. per minute of Engines *73*  
 „ of Screw *73*  
 Estimated power *90*  
 Effective power *478*  
 Diameter of Screw (or Paddle Wheels) *10 feet*  
 Pitch of Screw *17"*  
 No. of Blades (or Floats) *four*  
 Description of Screw (or Floats) *Common*  
 Holding down Bolts, size *1 1/8"*  
 „ present condition *good*

Bilge Pumps, No. ( *2* ) and size *3 1/2" x 15" stroke*  
 Feed „ No. ( *2* ) and size *do do*  
 Spare gear, if usual quantity on board Vessel *yes*  
 Fuel, where stowed *alongside of boiler*  
 „ space between Coal Bunkers and Boilers *4 3/4'*  
 „ for what quantity is space provided *150 tons*  
 Donkey Engine and Boiler *yes*  
 „ if fitted in Engine Room or on Deck *Boiler on deck*  
 „ can pump be worked by hand *No*  
 „ size of pump ( *3 1/2* ) and stroke *6"*  
 „ is hose of sufficient length to reach every part of the Vessel *yes*  
 No. ( *1* ) and continuation of hand pumps, if fitted in Engine Room *yes*

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.

*one round horizontal tubular, fired fore and aft with four furnaces, no superheating*

BOILER, maker of *Blackwood & Gordon*  
 „ age of *new*  
 „ when last taken out  
 „ present condition *good*  
 „ working pressure *60*  
 No. of surface Blow off Cocks to each Boiler *one surface and one bottom blow off*  
 SCREW SHAFT length *82 feet* diameter *8"*  
 width *3' 3"* if water-tight door on Engine Bulkhead. *yes*

Can each Boiler be used separately  
 What clear space between top of Boiler and woodwork *No wood work*  
 What clear space between Funnel and woodwork *do do*  
 Are Engine and Boiler Keelsons well connected fore and aft *yes*  
 Tunnel, thickness of plating *1/4" + 3/16"* height *3' 6"*

Port *of Porthlasgow* <sup>5<sup>th</sup></sup> day of *August* 18 *70*

*We* hereby certify, that the whole of the above Machinery and Boilers of the Iron (or Wood) Screw (or Paddle) Steam Vessel *'Renfrewshire'* belonging to *Porthlasgow* whereof *John Watt* is Master, Tons Register, and *90* H.P. have been carefully inspected and examined by *us* at *Porthlasgow* and *we* found the same, at this date, in good order and safe working condition.

*Blackwood & Gordon*  
 Marine Engineers.

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