

17885 Iron

LLOYD'S REGISTER OF BRITISH AND FOREIGN SHIPPING.

ENGINEER SURVEYOR'S REPORT ON MACHINERY.

ENGINES.

Rev 6/8/77

Port of Antwerp No. 458
Report (if any) on Hull of Vessel.

Description *Compound Inverted*
 Made by *Rait & Lindsay*
 When *1873* At *Glasgow*
 Diameter of cylinder *29" x 52"* Length of stroke *36 inches*
 No. of revolutions per minute *62*
 Point of cut off *1/2 FP*
 Diameter of screw shaft *11 inches*
 Diameter of crank shaft journals *11 inches*
 Diameter of screw, or of paddle wheel *12 feet*
 Pitch of screw *21 feet*
 No. of blades, *3* Total surface *34, 41* ^{square feet}
 No. of bilge pumps *2* and sizes *5 inches*
 Do they pump from each compartment *yes*

Are all the bilge suction pipes fitted with roses *yes*
 No. of feed pumps *2* and sizes *5 inches*
 What gauges are there attached to the engines and boilers ... *Back pressure, vacuum and steam gauges, one of each in engine room; one steam gauge for each boiler in stoke hole.*
 Description and size of Donkey Pumps ... *one vertical donkey pump 6 inches dia.*
 Where do they pump from ... *Bilge, sea and from circulating to condenser*
 No. of bilge injections *one* and sizes *2 3/4 inches*
 Are they connected to air, or circulating pumps *to circulating*
 Is there a hand pump in the engine room *one in stoke hole*
 Can it be worked by the main engines *No*
 Is there a deck hose of sufficient length to reach to any part of the vessel? *yes*

MAIN BOILERS.

Number *two* Description *Flat sided and half circular tops and bottoms*
 Made by *Rait & Lindsay*
 When *1873* At *Glasgow*
 Working pressure *60 lbs*
 Tested by hydraulic pressure to *130 lbs*, Date *1873*
90 lbs *now*
 Description of super-heating apparatus *none*
 Can each boiler be worked separately *yes*

Can the super-heater be shut off and the boilers worked separately? *yes*
 Description and area of safety valves on each boiler ... *Spiral Springs 31, 8 square inches*
 No. of square feet of fire-grate surface in each boiler *37 square feet*
 Are there separate blow off and brine cocks on each boiler, independent of those on the vessel's skin? *yes*
 Are all pipes, cocks, roses, and pumps in connection with the machinery accessible at all times? *yes*

DONKEY BOILER.

Description *Vertical with crop flues and spherical top*
 Where fixed *stoke hole*
 Working pressure *loaded 50 lbs*

Tested by hydraulic pressure to *100 lbs*, Date *1873*
 Description and area of safety valves *2 vertical 9, 8*
 No. of square feet of fire grate *9, 6*

PIPES, COCKS, AND CONNECTIONS.

Are all connections with the sea direct on the skin of the ship? *yes*
 Are they Kingston valves or common cocks ... *Main blow off Kingston Common Cocks to Donkey suction*
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stoke hold plates ... *they are below stoke hole plates*
 Are the discharge pipes above or below the deep water line? *Above*
 Are they each fitted with a discharge valve on the plating of the vessel? *yes*

What pipes are carried through the bunkers *Main Steam pipe*
 How are they protected *by a wrought iron tube*
 When were the stern tube, propeller, screw shaft, and all connections examined in dry dock? *now*
 Are the pipes, cocks, and valves arranged so as to prevent an unintentional connection between the sea and the bilge? *yes*
 Is the screw shaft-tunnel water tight and fitted with a sluice door on bulkhead? *yes*

Manufacturer.

I hereby certify that the whole of the above are correct particulars of the Machinery and Boilers of the Iron (or Wood) Screw (or Paddle) Steam Vessel *"Kinghorn"* owned by *D. R. Macgregor* of the Port of *Leith* of *455* Tons Register, and *120* Registered Horse Power, and that they have been carefully inspected and examined by me at *Antwerp* and found to be at this date, viz., *2^d March* 18 *77* in good order and safe working condition.

Amount of Fee for Survey ... £ *5:0:0*

(Travelling Expenses, if any, £ ...)

Engineer Surveyor to Lloyd's Register of Shipping.



AC
6-3-77

MMG

1820-0140018