

# Report on Steam Turbine Machinery.

No. 14914

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4a.

of writing Report 19... When handed in at Local Office 19... Port of Belfast Received at London Office.

in Survey held at Belfast Date, First Survey Visits included in Rpt etc. Last Survey 19... (Number of Visits ...)

Book on the Twin Screw "Magdalena" Tons {Gross... Net...}

at Belfast By whom built Hartland & Wolff Yard No. 1354 When built 1949

ines made at Peterborough By whom made Messrs P. Brotherhood Engine No. 97300 When made

ers made at ... By whom made ... Boiler No. ... When made

ft Horse Power at Full Power ... Owners Royal Mail Lines Ltd Port belonging to

m. Horse Power as per Rule ... Is Refrigerating Machinery fitted for cargo purposes ... Is Electric Light fitted

ude for which Vessel is intended

## AM TURBINE ENGINES, &c.—Description of Engines

of Turbines { Ahead... Direct coupled, single reduction geared } to ... propelling shafts. No. of primary pinions to each set of reduction gearing ...

ct coupled to { Alternating Current Generator... phase... periods per second } rated ... Kilowatts... Volts at... revolutions per minute;

upplying power for driving ... Propelling Motors, Type ...

d... Kilowatts... Volts at... revolutions per minute. Direct coupled, single or double reduction geared to... propelling shafts.

| TURBINE<br>LOADING. | H. P.                |                     |                 | I. P.                |                     |                 | L. P.                |                     |                 | ASTERN.              |                     |                 |
|---------------------|----------------------|---------------------|-----------------|----------------------|---------------------|-----------------|----------------------|---------------------|-----------------|----------------------|---------------------|-----------------|
|                     | HEIGHT OF<br>BLADES. | DIAMETER<br>AT TIP. | NO. OF<br>ROWS. | HEIGHT OF<br>BLADES. | DIAMETER<br>AT TIP. | NO. OF<br>ROWS. | HEIGHT OF<br>BLADES. | DIAMETER<br>AT TIP. | NO. OF<br>ROWS. | HEIGHT OF<br>BLADES. | DIAMETER<br>AT TIP. | NO. OF<br>ROWS. |
| 1st Expansion       |                      |                     |                 |                      |                     |                 |                      |                     |                 |                      |                     |                 |
| 2nd                 |                      |                     |                 |                      |                     |                 |                      |                     |                 |                      |                     |                 |
| 3rd                 |                      |                     |                 |                      |                     |                 |                      |                     |                 |                      |                     |                 |
| 4th                 |                      |                     |                 |                      |                     |                 |                      |                     |                 |                      |                     |                 |
| 5th                 |                      |                     |                 |                      |                     |                 |                      |                     |                 |                      |                     |                 |
| 6th                 |                      |                     |                 |                      |                     |                 |                      |                     |                 |                      |                     |                 |
| 7th                 |                      |                     |                 |                      |                     |                 |                      |                     |                 |                      |                     |                 |
| 8th                 |                      |                     |                 |                      |                     |                 |                      |                     |                 |                      |                     |                 |
| 9th                 |                      |                     |                 |                      |                     |                 |                      |                     |                 |                      |                     |                 |
| 10th                |                      |                     |                 |                      |                     |                 |                      |                     |                 |                      |                     |                 |

*Sancton Report No. 114096*

*SWK 13/4/49*

ft Horse Power at each Turbine { H.P. ... I.P. ... L.P. ... } Revolutions per minute, at full power, of each Turbine Shaft { H.P. ... 1st reduction wheel... I.P. ... L.P. ... main shaft... }

tor Shaft diameter at journals { H.P. ... I.P. ... L.P. ... } Pitch Circle Diameter { 1st pinion ... 1st reduction wheel... 2nd pinion ... main wheel... } Width of Face { 1st reduction wheel... main wheel... }

stance between centres of pinion and wheel faces and the centre of the adjacent bearings { 1st pinion ... 1st reduction wheel... 2nd pinion ... main wheel... }

lexible Pinion { 1st ... 2nd ... } Pinion Shafts, diameter at bearings { External ... Internal ... } 1st { ... } 2nd { ... } diameter at bottom of pinion teeth { 1st ... 2nd ... }

heel Shafts, diameter at bearings { 1st ... 2nd ... } diameter at wheel shroud, { 1st ... 2nd ... } Generator Shaft, diameter at bearings ... Propelling Motor Shaft, diameter at bearings ...

ermediate Shafts, diameter as per rule ... as fitted ... Thrust Shaft, diameter at collars as per rule ... as fitted ...

be Shaft, diameter as per rule ... as fitted ... Screw Shaft, diameter as per rule ... as fitted ... Is the { tube } shaft fitted with a continuous liner { ... }

onze Liners, thickness in way of bushes as per rule ... as fitted ... Thickness between bushes as per rule ... as fitted ... Is the after end of the liner made watertight in the propeller boss ... If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner ...

he liner does not fit tightly at the part between the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive ...

two liners are fitted, is the shaft lapped or protected between the liners ... Is an approved Oil Gland or other appliance fitted at the after end of the tube ...

ft ... If so, state type ... Length of Bearing in Stern Bush next to and supporting propeller ...

opeller, diameter ... Pitch ... No. of Bades ... State whether Moveable ... Total Developed Surface ... square feet.

Single Screw, are arrangements made so that steam can be led direct to the L.P. Turbine ... Can the H.P. or I.P. Turbines exhaust direct to the

ndenser ... No. of Turbines fitted with astern wheels ... Feed Pumps { No. and size ... How driven ... }

mps connected to the Main Bilge Line { No. and size ... How driven ... }

last Pumps, No. and size ... Lubricating Oil Pumps, including Spare Pump, No. and size ...

two independent means arranged for circulating water through the Oil Cooler ... Suctions, connected both to Main Bilge Pumps and Auxiliary

ge Pumps, No. and size:—In Engine and Boiler Room ... In Pump Room ...

Holds, &c.

ain Water Circulating Pump Direct Bilge Suctions, No. and size ... Independent Power Pump Direct Suctions to the Engine Room

ges, No. and size ... Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes ...

the Bilge Suctions in the Machinery Space led from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges ...

all Sea Connections fitted direct on the skin of the ship ... Are they fitted with Valves or Cocks ...

they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates ... Are the Overboard Discharges above or below the deep water ...

Are they each fitted with a Discharge Valve always accessible on the plating of the vessel ... Are the Blow Off Cocks fitted with a spigot and brass

ering plate ... What pipes pass through the bunkers ... How are they protected ...

at pipes pass through the deep tanks ... Have they been tested as per rule ...

all Pipes, Cocks, Valves and Pumps in connection with the machinery and all boiler mountings accessible at all times ...

he arrangement of valves and their connections such as to prevent the possibility of water passing from the sea or from water tanks into the cargo or machinery

ces, or from one compartment to another ... Is the Shaft Tunnel watertight ... Is it fitted with a watertight door ... worked from

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