

Report on Steam Turbine Machinery.

No. 14714

8-MAR 1949

4a.

of writing Report 19 When handed in at Local Office 19 Port of Belfast Received at London Office 8-MAR 1949
 in Survey held at Belfast Date, First Survey Visits included in Rpt 11a. Last Survey 19
 Book on the Twin Screw "Magdalena" (Number of Visits)
 Tons { Gross
 Net
 at Belfast By whom built Hartland & Wolff Yard No. 1354 When built 1949
 nines made at Peterborough By whom made Messrs P. Brotherhood Engine No. 94300 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
 ide for which Vessel is intended

AM TURBINE ENGINES, &c.—Description of Engines

Ahead..... Direct coupled,
 of Turbines Astern..... single reduction geared } to..... propelling shafts. No. of primary pinions to each set of reduction gearing.....
 double reduction geared }
 ct coupled to { Alternating Current Generator..... phase..... periods per second } rated..... Kilowatts..... Volts at..... revolutions per minute;
 supplying power for driving..... Direct Current Generator }
 Propelling Motors, Type.....
 d..... Kilowatts..... Volts at..... revolutions per minute. Direct coupled, single or double reduction geared to..... propelling shafts.

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

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. main shaft
 L.P. main shaft
 or Shaft diameter at journals { H.P. Pitch Circle Diameter { 1st pinion 1st reduction wheel
 I.P. 2nd pinion main wheel
 L.P. 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
 xible Pinion { 1st Pinion Shafts, diameter at bearings External 1st { 2nd { diameter at bottom of pinion teeth 1st
 2nd Internal 2nd { 2nd { diameter at bottom of pinion teeth 2nd
 eel Shafts, diameter at bearings { 1st diameter at wheel shroud, { 1st Generator Shaft, diameter at bearings
 main { main Propelling Motor Shaft, diameter at bearings
 ermediate Shafts, diameter as per rule Thrust Shaft, diameter at collars as per rule
 as fitted
 be Shaft, diameter as per rule Screw Shaft, diameter as per rule
 as fitted Is the { tube } shaft fitted with a continuous liner {
 as fitted { screw }
 onze Liners, thickness in way of bushes as per rule Thickness between bushes as per rule Is the after end of the liner made watertight in the
 as fitted
 peller 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
 wo 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.....
 peller, 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.....
 e 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.....
 e 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.....
 e all Sea Connections fitted direct on the skin of the ship..... Are they fitted with Valves or Cocks.....
 e 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.....
 e 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.....

4^A 14714

BOILERS, &c.—(Letter for record.....) Total Heating Surface of Boilers..... Working Pressure.....

Is Forced Draft fitted..... No. and Description of Boilers.....

Is a Report on Main Boilers now forwarded?.....

If so, is a report now forwarded?.....

Is { a Donkey } Boiler fitted?.....
{ an Auxiliary }

Is the donkey boiler intended to be used for domestic purposes only.....

Plans. Are approved plans forwarded herewith for Shafting.....
(If not, state date of approval)

Main Boilers.....

Auxiliary Boilers.....

Donkey Boilers.....

Oil Fuel Burning Arrangements.....

Superheaters..... General Pumping Arrangements.....

SPARE GEAR.

Has the spare gear required by the Rules been supplied.....

State the principal additional spare gear supplied.....

The foregoing is a correct description,

Dates of Survey while building { During progress of work in shops - - }
{ During erection on board vessel - - }
Total No. of visits.....

Dates of Examination of principal parts—Casings.....

Rotors.....

Blading.....

Gearing.....

Wheel shaft.....

Thrust shaft.....

Intermediate shafts.....

Tube shaft.....

Screw shaft.....

Propeller.....

Stern tube.....

Engine and boiler seatings.....

Engine holding down bolts.....

Completion of fitting sea connections.....

Completion of pumping arrangements.....

Boilers fixed.....

Engines tried under steam.....

Main boiler safety valves adjusted.....

Thickness of adjusting washers.....

Identification Mark.....

Rotor shaft, Material and tensile strength.....

Identification Mark.....

Flexible Pinion Shaft, Material and tensile strength.....

Identification Mark.....

Pinion shaft, Material and tensile strength.....

Identification Mark.....

1st Reduction Wheel Shaft, Material and tensile strength.....

Identification Mark.....

Wheel shaft, Material.....

Identification Mark.....

Thrust shaft, Material.....

Identification Marks.....

Intermediate shafts, Material.....

Identification Marks.....

Tube shaft, Material.....

Test pressure.....

Screw shaft, Material.....

Identification Marks.....

Steam Pipes, Material.....

Date of test.....

Is an installation fitted for burning oil fuel.....

Is the flash point of the oil to be used over 150°F.....

Have the requirements of the Rules for the use of oil as fuel been complied with.....

Is the vessel (not being an oil tanker) fitted for carrying oil as cargo.....

If so, have the requirements of the Rules been complied with.....

If the notation for ice strengthening is desired, state whether the requirements in this respect have been complied with.....

Is this machinery a duplicate of a previous case.....

If so, state name of vessel.....

General Remarks. (State quality of workmanship, opinions as to class, &c.).....

The two self contained turbo generating sets have now been efficiently installed on board the vessel. Tried under full working conditions. The emergency stop trip valve on Set B tested and all found in good working condition.

The amount of Entry Fee

£

When applied for.....

Special

£

19.....

Donkey Boiler Fee

£

When received.....

Travelling Expenses (if any)

£

19.....

Committee's Minute.....

FRI. 22 APR 1949

Assigned.....

Su F. E. mch. spt.

H. Russell

Engineer Surveyor to Lloyd's Register of Shipping.



© 2020

Lloyd's Register Foundation