

REPORT ON MACHINERY.

No. 91131.

11 DEC 1920

Received at London Office

Writing Report

When handed in at Local Office

8 DEC 1926

Port of Liverpool

Survey held at

Birkenhead

Date, First Survey

October 20th 1926

Last Survey

December 8th 1926

Book.

3 on the

Twin Screw Steamer "Almeda"

(Number of Visits 157)

Tons { Gross 12838
Net 7850

Built at

Birkenhead By whom built Cammell, Laird & Co. Ltd.

When built 1926

Machinery made at

Birkenhead

By whom made Cammell, Laird & Co. Ltd.

when made 1926

Machinery made at

Birkenhead

By whom made Cammell, Laird & Co. Ltd.

when made 1926

Registered Horse Power

Owners Blue Star Line (1920) Ltd.

Port belonging to London

Horse Power at Full Power 8400

Is Refrigerating Machinery fitted for cargo purposes

Yes

Is Electric Light fitted

Yes

TWIN ENGINE, &c.—Description of Engines Twin Screw Single Reduction Turbine

No. of Turbines 6, including astern

Diameter of Rotor Shaft Journals, H.P.

5 1/2"

L.P.

7"

Diameter of Pinion Shafts

6 1/2"

Diameter of Journals

6 1/2"

Distance between Centres of Bearings

2' 5 1/2"

Diameter of Pitch Circle

7' 4 1/2"

Diameter of Wheel Shaft

16"

Distance between Centres of Bearings

5' 1 1/2"

Diameter of Pitch Circle of Wheel

133' 7 1/2"

Diameter of Face

36"

Diameter of Thrust Shaft under Collars

14"

Diameter of Tunnel Shaft

as per rule 12' 9 1/2"

Diameter of same

as fitted 14' 2 1/2"

Diameter of Propellers

15' 6"

Pitch of Propellers

14' 0"

Blades

4

State whether Movable

Yes

Total Surface

86 sq. ft.

Diameter of Rotor Drum, H.P.

19 1/2"

L.P.

3' 4"

astern

2' 8"

Diameter of Groove, H.P.

L.P.

Astern

Revs. per Minute at Full Power, Turbine

2220

Propeller

124

PARTICULARS OF BLADING.

H.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.
ANSION	1 3/4" effective	22 1/2"	8	2 1/2"	3' 0 1/2"	3	1 1/2"	2' 10 1/2"	2
"	1 3/4"	23 1/2"	8	3"	3' 2"	3	2 1/2"	3' 0 1/2"	2
"	2 1/4"	2' 0"	7	3 1/2"	3' 2 1/2"	2	3 1/2"	3' 2 1/2"	1
"	2 1/4"	2' 1"	7	3 1/2"	3' 10 1/2"	2	3 1/2"	3' 3 1/2"	2
"	3 1/4"	2' 2 1/2"	7	3 1/2"	3' 11 1/2"	1			
"				4 1/2"	4' 1 1/2"	1			
"				5 1/2"	4' 3"	1			
"				6 1/2"	4' 5 1/2"	1			
"				7 1/2"	4' 7 1/2"	3			

Size of Feed pumps 2 - 17" x 12" x 28"

1 - 12" x 9" x 24"

Size of Bilge pumps 1 - 7" x 8" x 18"

1 - Emergency 5 1/2"

Ballast 10 1/2" x 12" x 24"

G.S. 10" x 8" x 18"

2 - Sanitary 7" x 8" x 18"

Size of Bilge suction in Engine Room 5 - 3"

6 - 2 1/2" cofferdam suction

1 - 6" x 1 - 5" direct suction

2 - 4" hose suction

In Holds, &c. 12 - 3"

3 - 3" in tunnels

1 - 2" cofferdam suction in

1 - 2 1/2" in duct keel

Injections 2 sizes 14" Connected to condenser, or to circulating pump

Bilge suction pipes fitted with roses

Connections with the sea direct on the skin of the ship

Rosed sufficiently high on the ship's side to be seen without lifting the stokehold plates

Each fitted with a Discharge Valve always accessible on the plating of the vessel

Pipes are carried through the bunkers

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

Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges

Shaft Tunnel watertight

Is it fitted with a watertight door

worked from

RS, &c.—(Letter for record)

Manufacturers of Steel Plates

Furnace Surface of Boilers

Pressure

After be worked separately

Area of fire grate in each boiler

Area of each valve

Distance between boilers or uptakes and bunkers or woodwork

Range of tensile strength

Diameter of rivet holes in long seams

Pitch of rivets

Working pressure of shell by rules

Description of longitudinal joint

No. of strengthening rings

Pressure of furnace by the rules

Stays to ditto: Sides

Stays

Thickens

Pitch of stays

Material of Lower back plate

Pitch of tubes

Wide water spaces

Girder at centre

Pressure by rules

Material

Description of longitudinal joint

Crown plates: Thickness

How stayed

The CPB removed

SUPERHEATER. Type *Horizontal* Date of Approval of Plan *✓* Tested by Hydraulic Pressure to *✓*

Date of Test *✓* Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler *✓*

Diameter of Safety Valve *✓* Pressure to which each is adjusted *✓* Is Easing Gear fitted *✓*

IS A DONKEY BOILER FITTED? *No* If so, is a report now forwarded? *✓*

SPARE GEAR. State the articles supplied:—

In excess of Rule. See accompanying list.

The foregoing is a correct description of the machinery of the vessel.

GAMWELL LAIRD AND COMPANY LIMITED.

Manufacturer.

LOCAL SECRETARY.

1925. Oct 20, 27, 29. Nov 6, 9, 17, 19, 25, 30. Dec 7, 11, 14, 18, 21, 29. 1926. Jan 5, 6, 7, 8, 9, 11, 13, 17, 20, 25, 26, 29. Feb 24, 9, 10, 11, 12, 15, 16, 17, 18. 22, 23, 24. Mar 3, 4, 5, 8, 9, 12, 15, 16, 17, 18, 19, 20, 23, 25, 29, 30, 31. Apr 7, 8, 12, 13, 20, 21, 22, 23, 27, 28. May 3, 6, 10, 11, 13, 17, 21, 26. 28, 31. June 1, 2, 3, 5, 7, 8, 11, 14, 15, 17, 18, 22, 24, 27, 28. July 2, 5, 7, 8, 9, 12, 14, 19, 20, 21, 23, 26, 27, 29. Aug 5, 7, 10, 11, 12, 13, 14, 17, 20, 21, 23, 24, 26, 27. Sept 1, 2, 6, 7, 13, 17, 20, 21, 22, 24, 27, 28, 29. Oct 1, 5, 7, 8, 11, 13, 14, 15, 18, 19, 20, 21, 22, 25, 29. Nov 9, 30. Dec 1, 2, 8. Total No. of visits *157*. Is the approved plan of main boiler forwarded herewith *✓*

Dates of Examination of principal parts—Casings *3/12/25 to 19/5/26* Rotors *11/12/25 to 19/12/26* Blading *15/3/26 to 13/4/26* Gearing *9/12/25 to 8/4/26*

Rotor shaft *3/12/25 to* Thrust shaft *13/1/25 to* Tunnel shafts *13/1/25 to* Screw shaft *23/3/25 to* Propeller *3/2/26 to 7/6/26*

Stern tube *3/12/25 to 3/5/26* Steam pipes tested *14/9/26 to 14/10/26* Engine and boiler seatings *27/5/26* Engines holding down bolts *26/7/26*

Completion of pumping arrangements *13/10/26* Boilers fixed *26/7/26* Engines tried under steam *1/12/26*

Main boiler safety valves adjusted *21/10/26, 9/12/26* Thickness of adjusting washers *SDB-F², A²; PSD-F², A²; SDB-F², M², A²; MDB-F², M², A²; PDB-F², M², A²*

Material and tensile strength of Rotor shafts *Steel 34/38 tons* Identification Mark on Do. *638, 639*

Material and tensile strength of Pinion shafts *Steel 40/44 tons* Identification Mark on Do. *612, 630, 639, 642*

Material of Wheel shaft *Steel* Identification Mark on Do. *6243* Material of Thrust shaft *Steel* Identification Mark on Do. *6245*

Material of Tunnel shafts *Steel* Identification Marks on Do. *6243, 6245, 6246, 6247, 6248, 6249, 6250, 6251, 6252, 6253, 6254* Material of Screw shafts *Steel* Identification Marks on Do. *6265*

Material of Steam Pipes *Steel* Test pressure *600 lb*

Is an installation fitted for burning oil fuel *Yes* Is the flash point of the oil to be used over 150°F. *Yes*

Have the requirements of Section 49 of the Rules been complied with *Yes*

Is this machinery a duplicate of a previous case *No* If so, state name of vessel *✓*

General Remarks (State quality of workmanship, opinions as to class, &c.) *The Machinery of this vessel has been built under Special Survey in accordance with the Rules, the approved plans and the Secretary's letters (E) of 30/7/25, 5/8/25, 10/11/25, 19/11/25, 20/10/25, 12/1/26, 22/1/26, 11/2/26, 19/3/26, 29/3/26, 30/6/26, 18/7/26. The Materials and Workmanship are of good quality. When tried under full working conditions at sea the Machinery was found satisfactory in every respect and, in my opinion, is eligible for the notation LMC 12.26 to be recorded in the Register Book, also fitted for oil fuel 12.26 F.P. above 150°F.*

The amount of Entry Fee ... £ *6* : *0* : *0* When applied for, *2/12/26*
Special Correspondence ... £ *151* : *12* : *0*
Donkey Boiler Fee ... £ *10* : *0* : *0* When received, *21/12/26*
Travelling Expenses (if any) ... £ *21* : *12* : *0*

B. G. Oxford
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned

+ L.M.C. 12.26. Ch.

Fitted for oil fuel 12.26

F.P. above 150°F.

When fee is paid.

Elec. Light.



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