

REPORT ON MACHINERY.

No. 42046
WED. JUL. 25 1922

Received at London Office

Date of writing Report 3. 7. 22 When handed in at Local Office 3. 7. 22 Port of Glasgow
No. in Survey held at Clydebank Date, First Survey 29. 12. 1914 Last Survey 22. 6. 1922.
Reg. Book. on the "CAASTERDIJK" (Number of Visits 26)
Tons { Gross
Net
Master Built at Schiedam By whom built New Waterway S.B.C./113 When built
Engines made at Clydebank By whom made John Brown & Co. Ltd. (S.B. 19) when made 1922
Boilers made at By whom made when made
Registered Horse Power Owners Port belonging to
Shaft Horse Power at Full Power 4200 Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted

TURBINE ENGINES, &c.—Description of Engines D.R. General Union Curtis Turbine No. of Turbines 3
Diameter of Rotor Shaft Journals, H.P. 3 1/2" L.P. 8" Diameter of Pinion Shaft H.P. 1 1/2" L.P. 2 1/2" No. 15
Diameter of Journals 5 1/2" 7" 10 1/2" Distance between Centres of Bearings H.P. 3' 3 1/4" L.P. 3' 3 1/4" Diameter of Pitch Circle H.P. 11' 8" L.P. 13' 7"
Diameter of Wheel Shaft 20" 18" Distance between Centres of Bearings 8' 8 1/2" Diameter of Pitch Circle of Wheel 123.618"
Width of Face 50" Diameter of Thrust Shaft under Collars 17 1/4" Diameter of Tunnel Shaft as per rule 16 1/2"
No. of Screw Shafts 1 with Continuous Union as per rule Diameter of same as fitted 17 3/4" Diameter of Propeller Pitch of Propeller
No. of Blades State whether Moveable Total Surface Diameter of Rotor Drum, H.P. L.P. Astern
Thickness at Bottom of Groove, H.P. L.P. Astern Revs. per Minute at Full Power Turbine L.P. 1600 Propeller 72

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.
1ST EXPANSION									
2ND									
3RD									
4TH									
5TH									
6TH									
7TH									
8TH									

No. and size of Feed pumps
No. and size of Bilge pumps
No. and size of Bilge suction in Engine Room
In Holds, &c.
No. of Bilge Injections sizes Connected to condenser, or to circulating pump Is a separate Donkey Suction fitted in Engine Room & size
Are all the bilge suction pipes fitted with roses Are the roses in Engine room always accessible
Are all connections with the sea direct on the skin of the ship Are they Valves or Cocks
Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Are the Discharge Pipes above or below the deep water line
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 covering plate
What pipes are carried through the bunkers How are they protected
Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times
Are the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges
Is the Screw Shaft Tunnel watertight Is it fitted with a watertight door worked from

BOILERS, &c.—(Letter for record) Manufacturers of Steel
Total Heating Surface of Boilers Is Forced Draft fitted No. and Description of Boilers
Working Pressure Tested by hydraulic pressure to Date of test No. of Certificate
Can each boiler be worked separately Area of fire grate in each boiler No. and Description of Safety Valves to
each boiler Area of each valve Pressure to which they are adjusted Are they fitted with easing gear
Smallest distance between boilers or uptakes and bunkers or woodwork Mean dia. of boilers Length Material of shell plates
Thickness Range of tensile strength Are the shell plates welded or flanged Descrip. of riveting: cir. seams
long. seams Diameter of rivet holes in long. seams Pitch of rivets Lap of plates or width of butt straps
Per centages of strength of longitudinal joint rivets Working pressure of shell by rules Size of manhole in shell
plates
Size of compensating-ring No. and Description of Furnaces in each Boiler Material Outside diameter
Length of plain part top Thickness of plates crown Description of longitudinal joint No. of strengthening rings
bottom Working pressure of furnace by the rules Combustion chamber plates: Material Thickness: Sides Back Top Bottom
Pitch of stays to ditto: Sides Back Top If stays are fitted with nuts or riveted heads Working pressure by rules End plates in steam space
Material of stays Diameter at smallest part Area supported by each stay Working pressure by rules Material of stays
Material Thickness Pitch of stays How are stays secured Working pressure by rules Material of Front plates at bottom
Diameter at smallest part Area supported by each stay Working pressure by rules Working pressure of plate by rules
Thickness Material of Lower back plate Thickness Greatest pitch of stays Working pressure of plate by rules
Diameter of tubes Pitch of tubes Material of tube plates Thickness: Front Back Mean pitch of stays
Pitch across wide water spaces Working pressures by rules Girders to Chamber tops: Material Depth and
thickness of girder at centre Length as per rule Distance apart Number and pitch of stays in each
Working pressure by rules Steam dome: description of joint to shell of strength of joint Diameter
Thickness of shell plates Material Description of longitudinal joint Diameter of rivet holes Pitch of rivets
Working pressure of shell by rules Crown plates: Thickness How stayed

SUPERHEATER. Type _____ 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? ☒ If so, is a report now forwarded? _____

SPARE GEAR. State the articles supplied:—

The foregoing is a correct description,
John Brown & Company, Limited. Manufacturers.
J. Henderson
Glydebank Secretary.

Dates of Survey while building: During progress of work in shops: 1919 Dec 29 1920 Feb 27 Mar 11 29 May 3 5 6 13 Jun 23 Aug 27 Nov 15 Dec 29 1921 Jan 27 Feb 10 Mar 23 Apr 6 May 6
During erection on board vessel: July 8 Aug 8 Dec 29 1922 Jan 19 Mar 17 Jun 13 16 22
Total No. of visits: 26
Is the approved plan of main boiler forwarded herewith ☒

Dates of Examination of principal parts—Casings 11/3/20 Rotors 22/2/22 Blading 22/2/22 Gearing 22/2/22
Rotor shaft 22/2/22 Thrust shaft 27/8/20 Tunnel shafts 15/11/22 27/25/22 Screw shaft 17/2/21 Propeller _____
Stern tube _____ Steam pipes tested _____ Engine and boiler seatings _____ Engines holding down bolts _____
Completion of pumping arrangements _____ Boilers fired _____ Engines tried under steam _____
Main boiler safety valves adjusted _____ Thickness of adjusting washers _____
Material and tensile strength of Rotor shaft 3M Steel 34 to 38 tons Identification Mark on Do. 790 1072 706
Material and tensile strength of Pinion shaft Nickel Steel 40 to 45 tons Identification Mark on Do. 2952 2953 2509 2501
Material of Wheel shaft Steel Identification Mark on Do. 3176 2304 22/2/22 Material of Thrust shaft Steel Identification Mark on Do. 3245 2704
Material of Tunnel shafts Steel Identification Marks on Do. See below * Material of Screw shafts Steel Identification Marks on Do. 1839 2033 2704 17/2/21
Material of Steam Pipes _____ Test pressure _____
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 Section 49 of the Rules been complied with ☒
* 1944 1996 1445 2105 1302
15/1/20 27/8/20 29/12/21 16/4/22
Is this machinery a duplicate of a previous case ☒ If so, state name of vessel 112, New Waterway S.R.C.
Engines 23 24 25 26
19 19 19 19

General Remarks (State quality of workmanship, opinions as to class, &c.) This machinery has been built under special survey the materials and workmanship are of good description, it has been erected and tried in Des engine shop under steam and will in my opinion be eligible to have notation of +LME with date when it has been satisfactorily fitted on board and tried under steam. This machinery is to be sent to Holland

The amount of Entry Fee ... £ 3 :
Special ... £ 27 : 10 :
Donkey Boiler Fee ... £ :
Travelling Expenses (if any) £ :
When applied for, 3-7-22
When received, 31-7-22

A. McKend
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 4-III-1922
Assigned Transmit to London

TUE. 14 NOV. 1922
See Rot. 12589
Lloyd's Register Foundation

22/2/22
Glasgow

Certificate (if required) to be sent to: (The Surveys are requested not to write on or below the space for Committee's Minute.)