

REPORT ON MACHINERY.

No. 15,923.

Received at London Office

WED. MAR. 30 1921

Date of writing Report 28 March 1921 When handed in at Local Office 28 March 1921 Port of Leith
 Date, First Survey 17 Feb 1921 Last Survey 25 March 1921
 (Number of Visits 16)

No. in Survey held at Leith
 Reg. Book. 8.8. "Desdemona"
 on the Desdemona

Master Desdemona Built at Cuback By whom built Peliffen & Henry Koch Tons { Gross 1915 Net 1914 When built 1914

Engines made at Altona By whom made Ottensen when made 1915
 Boilers made at Cuback By whom made Henry Koch when made 1914

Registered Horse Power 162 Owners Cuth. Hull & Hamburg P.O. Co Ltd Port belonging to London

Nom. Horse Power as per Section 28 162 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes

ENGINES, &c.—Description of Engines Triple Expansion No. of Cylinders 3 No. of Cranks 3
 Dia. of Cylinders 18 1/2, 29 7/8, 46 1/2 Length of Stroke 32 1/2 Revs. per minute 95 Dia. of Screw shaft 10 3/8 Material of screw shaft steel

Is the screw shaft fitted with a continuous liner the whole length of the stern tube yes Is the after end of the liner made water tight yes
 in the propeller boss yes If the liner is in more than one length are the joints burned yes If the liner does not fit tightly at the part yes
 between the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive yes If two yes
 liners are fitted, is the shaft lapped or protected between the liners yes Length of stern bush 33"

Dia. of Tunnel shaft 9 1/2 Dia. of Crank shaft journals 9 1/8 Dia. of Crank pin 9 1/2 Size of Crank webs 6 x 15 1/2 Dia. of thrust shaft under 51.7"
 collars 9 1/2 Dia. of screw 12.8 Pitch of Screw 12.0 No. of Blades 4 State whether moveable no Total surface 51.7"

No. of Feed pumps 2 Diameter of ditto 2 5/8 Stroke 21 1/2 Can one be overhauled while the other is at work yes
 No. of Bilge pumps 2 Diameter of ditto 2 7/8 Stroke 21 1/2 Can one be overhauled while the other is at work yes
 No. of Donkey Engines 2 Sizes of Pumps 5 1/4 x 3 1/2 x 5 1/2, 6 x 8 1/2 x 6 No. and size of Suctions connected to both Bilge and Donkey pumps 2 - 2 1/2" in each

In Engine Room 4 Bl. Am. 3 - 2 1/2, 1 spec. 2 1/2 In Holds, &c. 2 - 2 1/2" in each
 No. of Bilge Injections 1 sizes 5 Connected to condenser, or to circulating pump yes Is a separate Donkey Suction fitted in Engine room & size yes - 2 1/2"

Are all the bilge suction pipes fitted with roses yes Are the roses in Engine room always accessible yes Are the sluices on Engine room bulkheads always accessible yes
 Are all connections with the sea direct on the skin of the ship yes Are they Valves or Cocks both
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates yes Are the Discharge Pipes above or below the deep water line above
 Are they each fitted with a Discharge Valve always accessible on the plating of the vessel yes Are the Blow Off Cocks fitted with a spigot and brass covering plate yes
 How are they protected yes

What pipes are carried through the bunkers none
 Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times yes
 Are the Bilge Suction Pipes, Cocks, and Valves arranged so as to prevent any communication between the sea and the bilges yes
 Is the Screw Shaft Tunnel watertight yes Is it fitted with a watertight door yes worked from E. R. top grating

BOILERS, &c.—(Letter for record S) Manufacturers of Steel 2 Single Ended
 Total Heating Surface of Boilers 2715 Is Forced Draft fitted no No. and Description of Boilers 2 Single Ended
 Working Pressure 199 lbs Tested by hydraulic pressure to 200 lbs Date of test 36" No. of Certificate 36"

Can each boiler be worked separately yes Area of fire grate in each boiler 36" No. and Description of Safety Valves to 36"
 each boiler double spring loaded Area of each valve 5.94 Pressure to which they are adjusted 200 lbs Are they fitted with easing gear yes
 Smallest distance between boilers or uptakes and bunkers or woodwork 12" Mean dia. of boilers 11.9" Length 10.11" Material of shell plates steel

Thickness 1 1/2 Range of tensile strength 132 Are the shell plates welded or flanged no Descrip. of riveting: cir. seams D.T.R.
 long. seams A.R.D.B.S. Diameter of rivet holes in long. seams 1 1/8 Pitch of rivets 13 3/8 Lap of plates on width of butt straps 24 3/8
 Per centages of strength of longitudinal joint 91 Working pressure of shell by rules 206 Size of manhole in shell 11 3/4 x 15 3/4

Size of compensating ring 29 3/8 x 33 1/4 No. and Description of Furnaces in each boiler 2 corrugated Material steel Outside diameter 41 1/8
 Length of plain part top 9" Thickness of plates bottom 16" Description of longitudinal joint weld No. of strengthening rings 7/8"
 Working pressure of furnace by the rules 212 Combustion chamber plates: Material steel Thickness: Sides 5/8" Back 5/8" Top 5/8" Bottom 7/8"

Pitch of stays to ditto: Sides 7 1/4 x 7 1/4 Back 7 1/4 x 7 1/4 Top 7 1/4 x 7 1/4 If stays are fitted with nuts or riveted heads no Working pressure by rules 207 End plates in steam space: 207
 Material of stays steel Area at smallest part 1.22 Area supported by each stay 52.56 Working pressure by rules 199 Material of stays steel
 Material steel Thickness 7/8" Pitch of stays 15 3/4 x 14 3/8 How are stays secured D.N.T.R.W. Working pressure by rules 252 Material of Front plates at bottom steel
 Area at smallest part 5.4 Area supported by each stay 222.46 Working pressure by rules 252 Working pressure of plate by rules 262
 Thickness 1 1/8" Material of Lower back plate steel Thickness 7/8" Greatest pitch of stays 12 1/4 x 7 1/4 Working pressure of plate by rules 262
 Diameter of tubes 3 1/2 Pitch of tubes 4 1/4 x 4 1/2 Material of tube plates steel Thickness: Front 3/4" Back 3/4" Mean pitch of stays 9 1/4"

Pitch across wide water spaces 14 1/2 Working pressures by rules 266 Girders to Chamber tops: Material steel Depth and 3 @ 7 1/4"
 thickness of girder at centre 8 1/4 x 20 5/8 Length as per rule 28 3/8 Distance apart 7 1/8 Number and pitch of stays in each 3 @ 7 1/4"
 Working pressure by rules 212 Steam dome: description of joint to shell yes Diam. of rivet holes yes
 Diameter yes Thickness of shell plates yes Material yes Description of longitudinal joint yes Thickness yes How stayed yes
 Pitch of rivets yes Working pressure of shell by rules yes Crown plates yes Tested by Hydraulic Pressure to 2020

SUPERHEATER. Type none Date of Approval of Plan yes Is a Safety Valve fitted to each Section of the Superheater which can be shut off from the Boiler yes
 Date of Test yes Pressure to which each is adjusted yes Is Easing Gear fitted yes

Diameter of Safety Valve yes

IS A DONKEY BOILER FITTED?

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:— 2 connecting rod top end bolts & nuts: 2 connecting rod bottom end bolts & nuts: 2 main bearing bolts: 1 set of coupling bolts: 1 set of feed & bilge pump valves: a quantity of assorted bolts & nuts: iron of various sizes A. C. & L. D. valve spindle: 1 set of piston rings for each cylinder.

The foregoing is a correct description,

Manufacturer.

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

Is the approved plan of main boiler forwarded herewith

" " " donkey " " "

Dates of Examination of principal parts—Cylinders Slides Covers Pistons Rods
Connecting rods Crank shaft Thrust shaft Tunnel shafts Screw shaft Propeller
Stern tube Steam pipes tested 11.3.21 Engine and boiler seatings Engines holding down bolts

Completion of pumping arrangements Boilers fixed Engines tried under steam

Completion of fitting sea connections Stern tube Screw shaft and propeller

Main boiler safety valves adjusted 19.3.21 Thickness of adjusting washers Port BL { 0V 5/16" 8V 9/32" Star BL { 0V 5/16" 8V 9/32"

Material of Crank shaft Identification Mark on Do. Material of Thrust shaft Identification Mark on Do.

Material of Tunnel shafts Identification Marks on Do. Material of Screw shafts Identification Marks on Do.

Material of Steam Pipes Steel Test pressure 600 lbs per sq. in.

Is an installation fitted for burning oil fuel no 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 ✓

Is this machinery duplicate of a previous case ✓ If so, state name of vessel

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

The machinery of this vessel has been opened up for examination: the construction & material found good. It was tried under steam and found satisfactory.

It is submitted that this vessel is eligible for a record of L. M. C. 3.21 in the Register Book.

The amount of Entry Fee ... £ : : When applied for, 19...
Special ... £ : : 19...
Donkey Boiler Fee ... £ : : When received, 19...
Travelling Expenses (if any) £ : See 19...

Committee's Minute

Assigned

FRI 23 MAR 1922

L.M.C. 3.21

C.L.

A. T. Thomas

Engineer Surveyor to Lloyd's Register of Shipping.

FRI 31 MAR 1922

FRI JUL 14 1922

FRI MAR 7 1924

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