

REPORT ON MACHINERY.

No. 11692
IUE. MAR. 29 1921

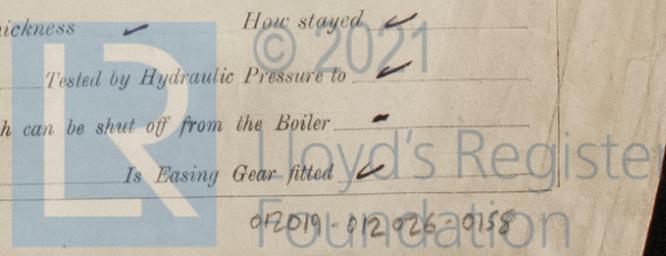
Date of writing Report 21 Nov 1921 When handed in at Local Office 10 Port of Rotterdam
 No. in Survey held at Tapundrecht Date, First Survey 26 Jan Last Survey 8 March 1921
 Reg. Book. on the Steel Screw Steamer "MILLEWA" ex KAMPEN (Number of Visits 7) Tons { Gross 1407.79
 Net 804.86
 Master ? Built at Kinderdijk By whom built Gebr Jansen When built 1921
 Engines made at Albion By whom made Albion when made 1921
 Boilers made at ditto By whom made ditto when made 1921
 Registered Horse Power 174 Owners Nobels Industries Co Port belonging to Glasgow.
 Nom. Horse Power as per Section 28 174 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes

ENGINES, &c.—Description of Engines Vertical Triple Expansion No. of Cylinders 3 No. of Cranks 3
 Dia. of Cylinders 17 1/2 x 29 1/8 x 46 1/16 Length of Stroke 36 Revs. per minute 85 Dia. of Screw shaft 10.6 Material of screw shaft St. S.
 Is the screw shaft fitted with a continuous liner the whole length of the stern tube no liner Is the after end of the liner made water tight in the propeller boss ✓
 If the liner is in more than one length are the joints burned ✓ If the 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 ✓
 If two liners are fitted, is the shaft lapped or protected between the liners ✓ Length of stern bush 7'-3"
 Dia. of Tunnel shaft 9.12 Dia. of Crank shaft journals 9.58 Dia. of Crank pin 9 7/8 Size of Crank webs 6 1/2 x 8 1/4 Dia. of thrust shaft under collars 9 7/8 Dia. of screw 12-9/8 Pitch of Screw 15'-0" No. of Blades 4 State whether moveable no Total surface 54 7/8
 No. of Feed pumps 2 Diameter of ditto 3 1/4 Stroke 10" Can one be overhauled while the other is at work yes
 No. of Bilge pumps 2 Diameter of ditto 4 5/16 Stroke 10" Can one be overhauled while the other is at work yes
 No. of Donkey Engines 2 Sizes of Pumps 8 x 8 x 10 No. and size of Suctions connected to both Bilge and Donkey pumps
 In Engine Room 2 x 2 1/2" in Tunnel 1 x 2 1/2" in D. Tank 1 x 2 1/2" In Holds, &c. I 2 x 2 3/4" II 2 x 2 1/2"

No. of Bilge Injections 1 sizes 4" Connected to condenser or to circulating pump ✓ Is a separate Donkey Suction fitted in Engine room & size 2 x 2 3/4"
 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 ✓
 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
 What pipes are carried through the bunkers none How are they protected ✓
 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 BR top platform

BOILERS, &c.—(Letter for record 15) Manufacturers of Steel Gilbert & Sullivan Glasgow
 Total Heating Surface of Boilers 3163 3/4 Is Forced Draft fitted no No. and Description of Boilers 2 SE multibubblers
 Working Pressure 100 lbs Tested by hydraulic pressure to 320 lbs Date of test 26-1-21 No. of Certificate ✓
 Can each boiler be worked separately yes Area of fire grate in each boiler 44.5 1/2 No. and Description of Safety Valves to each boiler 2 Spring loaded Area of each valve 4.43 1/2 Pressure to which they are adjusted 100 lbs Are they fitted with easing gear yes
 Smallest distance between boilers or uptakes and bunkers or woodwork 12" Mean dia. of boilers 12'-5 1/8" Length 10'-5 1/4" Material of shell plates St. S.
 Thickness 1 1/8" Range of tensile strength 28, 32 Are the shell plates welded or flanged no Descrip. of riveting: cir. seams D Lap long. seams Thick DB
 Diameter of rivet holes in long. seams 1 1/4" Pitch of rivets 8 3/8" Lap of plates or width of butt straps 19 3/4"
 Per centages of strength of longitudinal joint rivets 95 Working pressure of shell by rules 199 1/2 Size of manhole in shell 12 x 16"
 Size of compensating ring 26 1/4 x 1 1/8" No. and Description of Furnaces in each boiler 2 Horizontal Material St. S. Outside diameter 49 1/4"
 Length of plain part ✓ Thickness of plates crown 5/8" Description of longitudinal joint Welded No. of strengthening rings ✓
 Working pressure of furnace by the rules 204 Combustion chamber plates: Material St. S. Thickness: Sides 5/8" Back 9/16" Top 5/8" Bottom 1"
 Pitch of stays to ditto: Sides 7 x 7/4" Back 7" Top 7 x 7/8" If stays are fitted with nuts or riveted heads Both Working pressure by rules 180
 Material of stays St. S. Area at smallest part 1.40 1/2 Area supported by each stay 50 1/2 Working pressure by rules 276 End plates in steam space: Material St. S. Thickness 1" Pitch of stays 16 1/2" How are stays secured Secured in plates Working pressure by rules 207 Material of stays St. S.
 Area at smallest part 5.45 Area supported by each stay 273 Working pressure by rules 208 Material of Front plates at bottom St. S.
 Thickness 1" Material of Lower back plate St. S. Thickness 1" Greatest pitch of stays 14 1/8" Working pressure of plate by rules 300
 Diameter of tubes 3 1/4" Pitch of tubes 4 5/16" Material of tube plates St. S. Thickness: Front 1" Back 7/8" Mean pitch of stays 8 5/8"
 Pitch across wide water spaces 14 1/2" Working pressures by rules 300 Girders to Chamber tops: Material St. S. Depth and thickness of girder at centre 7 7/8" x 7 1/16" Length as per rule 29" Distance apart 7 7/8" Number and pitch of stays in each 2 x 7"
 Working pressure by rules 192 Steam dome: description of joint to shell ✓ % of strength of joint ✓
 Diameter — Thickness of shell plates ✓ Material ✓ Description of longitudinal joint ✓ Diam. 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? *no*

If so, is a report now forwarded?

SPARE GEAR. State the articles supplied:— 2 bottom end bolts and nuts, 2 top end bolts and nuts, 2 main bearing bolts, 1 set of coupling bolts, 1 set of feed and bilge pump valves, 1 set of piston rings assorted bolts and nuts, iron of various sizes, 1 propeller shaft with propeller and bedrill patent ring, 1 set of top and bottom end brasses, 1 valve spindle with eccentric disc and strap, 1 feed and bilge pump ram, air and 1 circulating pump bucket rod, 12+4 boiler tubes, 15 condenser tubes + 50 fumbles, 2 check valves, 6 puncheon bolts.

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building { During progress of work in shops -- } 26/1- 22-25/2- 2-4-7-8/3
{ During erection on board vessel --- }
Total No. of visits 7

Is the approved plan of main boiler forwarded herewith *Returned in Census Office*

Dates of Examination of principal parts—Cylinders 2 1/2 Slides 2 1/2 Covers 2 1/2 Pistons 2 1/2 Rods 2 1/2
Connecting rods 2 1/2 Crank shaft 2 1/2 Thrust shaft 2 1/2 Tunnel shafts 2 1/2 Screw shaft 2/3 Propeller 2/3
Stern tube 4/3 Steam pipes tested 26/1 Engine and boiler seatings 2 1/2 Engines holding down bolts 2 1/2
Completion of pumping arrangements 4-7/3 Boilers fixed ✓ Engines tried under steam 22/2
Completion of fitting sea connections 7/3 Stern tube 2/3 Screw shaft and propeller 2/3
Main boiler safety valves adjusted 7/3 Thickness of adjusting washers SB 3/4- 13/16 Port 19/32- 3/4
Material of Crank shaft *See* Identification Mark on Do. *N.V. mark* Material of Thrust shaft *See* Identification Mark on Do. *N.V.*
Material of Tunnel shafts *See* Identification Marks on Do. *Krupp* Material of Screw shafts *See* Identification Marks on Do. *Krupp*
Material of Steam Pipes *See* Test pressure 540 lbs

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 *no* If so, state name of vessel

General Remarks (State quality of workmanship, opinions as to class, &c.) *The machinery has been built and fitted under the supervision of the Marine Veritas Surveyors carefully examined as per instructions by Secretary's letter and found in accordance with the approved plans. The machinery has been found working satisfactorily during a trial and may in my opinion be recorded in the Society's Register Book with LMC 3-21.*

It is submitted that this vessel is eligible for THE RECORD. LMC. 3.21

Bel AFR

The amount of money charged { *See London* } When applied for, 26/3 19 20/1
Donkey Boiler Fee { *See London* } When received, 30/3/21
Travelling Expenses (if any) £ 40.00

A. P. B. J.
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI. 8 APR. 1921

FRI. 11 NOV. 1921

Assigned *LMC 3.21*

FRI. MAY. 19 1922

FRI. JUN. 30 1922

CERTIFICATE WRITTEN



© 2021

Lloyd's Register Foundation

Certificate (if required) to be sent to Surveyors

The Surveyors are requested not to write on or below the space for Committee's Minute.