

REPORT ON MACHINERY.

No. 10882.

Date of writing Report 13th Nov. 1920 at 4th Port Middlesbrough Port of MIDDLESBROUGH
 No. in Survey held at Middlesbrough Date, First Survey 24th Sept 1919 Last Survey 18th Nov. 1920
 Reg. Book. 18084 (S) on the SS "Citta di Messina" (Hunniss SBC No. 2. R. B. & Co. engine No. 2036)
 Master Andrea Giacomina Built at Haverton Hill on Ys By whom built Hunniss Shipbuilding Co. Ltd Gross 5840
 Engines made at Middlesbrough By whom made Richardsons Westgarth & Co. Ltd Net 3620
 Boilers made at do By whom made do When built 1920
 Registered Horse Power ✓ Owners Peirce Bros. when made 1920
 Nom. Horse Power as per Section 28 543 Is Refrigerating Machinery fitted for cargo purposes no Port belonging to Naples
 Is Electric Light fitted Yes

ENGINES, &c.—Description of Engines Inverted Triple Expansion No. of Cylinders 3 No. of Cranks 3
 Dia. of Cylinders 24" 45" 45" Length of Stroke 51" Revs. per minute 73 Dia. of Screw shaft as per rule 12" Material of Iron
 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
 in the propeller boss Yes If the liner is in more than one length are the joints burned one length 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 Yes If two
 liners are fitted, is the shaft lapped or protected between the liners Yes Length of stern bush 5' - 2"
 Dia. of Tunnel shaft as per rule 13.64 Dia. of Crank shaft journals as per rule 14.35 Dia. of Crank pin 15" Size of Crank webs 29" x 9 3/4" Dia. of thrust shaft under
 collars 15 1/4" Dia. of screw 14" - 9" Pitch of Screw 18" - 0" No. of Blades 4 State whether moveable no Total surface 100 sq ft
 No. of Feed pumps 2 Diameter of ditto 8" x 10 1/2" Stroke 21" Can one be overhauled while the other is at work Yes
 No. of Bilge pumps 2 Diameter of ditto 4 1/4" Stroke 24" Can one be overhauled while the other is at work Yes
 No. of Donkey Engines 3 Sizes of Pumps 8" x 6" x 8" 10" x 12" x 10" 4" x 4" x 8" No. and size of Suctions connected to both Bilge and Donkey pumps
 In Engine Room 2 of 3 1/2" and 2 of 3 1/2" direct In Holds, &c. 2 of 3 1/2" in each hold and 1 1/4"
 No. of Bilge Injections 1 sizes 8" Connected to condenser, or to circulating pump no a separate Donkey Suction fitted in Engine room & size 3 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
 What pipes are carried through the bunkers none How are they protected Yes
 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
 Dates of examination of completion of fitting of Sea Connections 18.4.20 of Stern Tube 4.9.20 Screw shaft and Propeller 18.9.20
 Is the Screw Shaft Tunnel watertight Yes Is it fitted with a watertight door Yes worked from Top Platform

BOILERS, &c.—(Letter for record S) Manufacturers of Steel John Spencer & Sons Ltd
 Total Heating Surface of Boilers 8580 Is Forced Draft fitted Yes No. and Description of Boilers 3 Multitubular Cylindrical
 Working Pressure 180 lbs Tested by hydraulic pressure to 360 lbs Date of test 14.5.20 No. of Certificate 6123
 Can each boiler be worked separately Yes Area of fire grate in each boiler 62.5 sq ft No. and Description of Safety Valves to
 each boiler Two direct Spring loaded Area of each valve 12.66 sq in Pressure to which they are adjusted 185 lbs Are they fitted with easing gear Yes
 Smallest distance between boilers or uptakes and bunkers or woodwork 18" Mean dia. of boilers 15' - 6 1/2" Length 2' - 1 1/8" Material of shell plates Stal
 Thickness 1 1/4" Range of tensile strength 28/32 Are the shell plates welded or flanged no Descrip. of riveting: cir. seams BR lap
 long. seams BR ANS Diameter of rivet holes in long. seams 1 1/4" Pitch of rivets 8 1/2" Lap of plates or width of butt straps 14 1/2"
 Per centages of strength of longitudinal joint: rivets 86.08 Working pressure of shell by rules 181 lbs Size of manhole in shell 16 1/2" x 13"
 Size of compensating ring 30 1/2" x 29" No. and Description of Furnaces in each boiler 3 Deightous Material Stal Outside diameter 49 3/4"
 Length of plain part top 19 1/2" Thickness of plates bottom 19 1/2" Description of longitudinal joint Weld No. of strengthening rings ✓
 Working pressure of furnace by the rules 190 lbs Combustion chamber plates: Material Stal Thickness: Sides 19 1/32" Back 11/16" Top 19 1/32" Bottom 23/32"
 Pitch of stays to ditto: Sides 4 1/2" x 6 5/8" Back 8 3/8" x 8" Top 4 1/4" x 6 5/8" If stays are fitted with nuts or riveted heads riveted heads Working pressure by rules 180 lbs
 Material of stays Stal Diameter at smallest part 1 3/8" Area supported by each stay 49 sq in Working pressure by rules 193 lbs End plates in steam space
 Material Stal Thickness 1 1/8" Pitch of stays 19 1/2" x 15 3/4" How are stays secured Hub & Washer Working pressure by rules 192 lbs Material of stays Stal
 Diameter at smallest part 6" Area supported by each stay 31.6 Working pressure by rules 206 lbs Material of Front plates at bottom Stal
 Thickness 1 5/16" Material of Lower back plate Stal Thickness 1 3/16" Greatest pitch of stays 13 3/4" x 8" Working pressure of plate by rules 181 lbs
 Diameter of tubes 2 1/2" Pitch of tubes 3 3/4" x 3 3/4" Material of tube plates Stal Thickness: Front 15/16" Back 13/16" Mean pitch of stays 10 3/8"
 Pitch across wide water spaces 13 1/2" Working pressures by rules 185 lbs Girders to Chamber tops: Material Stal Depth and
 thickness of girder at centre 8 3/4" x 1 1/2" Length as per rule 32 3/16" Distance apart 4 1/16" Number and pitch of stays in each 3 - 6 5/8"
 Working pressure by rules 198 lbs Superheater or Steam chest; how connected to boiler ✓ Can the superheater be shut off and the boiler worked
 separately ✓ Diameter ✓ Length ✓ Thickness of shell plates ✓ Material ✓ Description of longitudinal joint ✓ Diam. of rivet
 holes ✓ Pitch of rivets ✓ Working pressure of shell by rules ✓ Diameter of flue ✓ Material of flue plates ✓ Thickness ✓
 If stiffened with rings ✓ Distance between rings ✓ Working pressure by rules ✓ End plates: Thickness ✓ How stayed ✓
 Working pressure of end plates ✓ Area of safety valves to superheater ✓ Are they fitted with easing gear ✓

IS A DONKEY BOILER FITTED? *No*

If so, is a report now forwarded? ☒

SPARE GEAR. State the articles supplied:—

Propeller and screw shaft. 2 Top end bolts + nuts, 2 Bottom end bolts + nuts. 2 Main bearing bolts + nuts. 1 set of Coupling bolts. Centrifugal pump impeller shaft. 16 Condenser tubes. 1 set of Feed pump valves. 1 set of Air pump valves. 1 set of valves and seats for Bilge pumps. 1 Main and 1 Auxiliary check valve. 1 Filter basket. 3 Safety valve springs. 1 pair of bottom end bushers. 2 pair of Top end bushers. 1 set of bolts + nuts. Rod + short steel

The foregoing is a correct description,

For and on behalf of
RICHARDSON, WESTGARTH & Co., Ltd.

William Lloyd

Manufacturer.

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

*1919. Sep 24. 29. Oct 1. 7. 13. 16. 28. Nov 4. 10. 14. 17. 20. 24. Dec 1. 9. 17. 19. 24.
1920. Jan 5. 12. 16. 19. 21. 26. 30. Feb 4. 16. 19. 20. 23. 27. March 1. 3. 5. 8. 13. 17. 20.
29. Apr 1. 8. 12. 16. 20. 26. 30. May 5. 13. 14. 18. 21. June 2. 8. 11. 16. 18. 22. 28. 29.
July 2. 6. 7. 13. 18. 19. 24. 27. 29. Aug 4. 11. 12. 24. Sep 2. 6. 7. 8. 15. 21. 29. Oct 4. 8.
13. 18. 20. 27. Nov 2. 4. 8. 16. 18.*

Is the approved plan of main boiler forwarded herewith

" " " donkey " " "

Dates of Examination of principal parts—Cylinders *29. 4. 20* Slides *24. 8. 20* Covers *13. 4. 20* Pistons *4. 8. 20* Rods *29. 4. 20*
Connecting rods *29. 6. 20* Crank shaft *12. 12. 19* Thrust shaft *11. 6. 20* Tunnel shafts *2. 6. 20* Screw shaft *23. 4. 20* Propeller *4. 8. 20*
Stern tube *4. 8. 20* Steam pipes tested *15. 10. 20* Engine and boiler seatings *15. 4. 20* Engines holding down bolts *4. 10. 20*
Completion of pumping arrangements *8. 11. 20* Boilers fixed *4. 10. 20* Engines tried under steam *2. 11. 20*
Main boiler safety valves adjusted *2. 11. 20* Thickness of adjusting washers *Port 1/16 SV 1/32 Star 1/16 Centre 1/16*
Material of Crank shaft *Steel* Identification Mark on Do. *6141 AB* Material of Thrust shaft *Steel* Identification Mark on Do. *4287 CB*
Material of Tunnel shafts *Steel* Identification Marks on Do. *4244 B.C.* Material of Screw shafts *Iron* Identification Marks on Do. *6142 AB*
Material of Steam Pipes *Steel* Renewed in steel *133* Test pressure *550 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 of this vessel has been built under Special Survey: the workmanship and materials are good. It has been efficiently fitted on board and proved satisfactory under working conditions.

The vessel is eligible in my opinion to have the notation of L.M.C. 11.20. made in the Register Book.

It is submitted that
this vessel is eligible for
THE RECORD. + L.M.C. 11.20. FH

RM

10/12/20

GRB

The amount of Entry Fee £ 3 : 0 :
Special ... £ 48 : 13 :
Donkey Boiler Fee £ : :
Travelling Expenses (if any) £ : :
When applied for, *3/12/20*
When received, *16/12/20*

Committee's Minute

Assigned

+ L.M.C. 11.20
L.D.

Wm Cowie & Wm Morrison
Engineer Surveyor to Lloyd's Register of British & Foreign Shipping.



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Foundation