

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

No. 12198

Received at London Office

Date of writing Report 1/1/ 19 25 When handed in at Local Office

1/1/ 19 25 Port of Middlesbrough

Survey held at South Bank

Date, First Survey 15th May 1924 Last Survey 1st January 1925

Number of Visits 40

on the S.S. HAMSTERLEY

built at South Bank By whom built Smith's Dock Co Ltd

Yard No. 800

Tons } Gross
Net
When built 1925

Engines made at South Bank By whom made Smith's Dock Co Ltd

Engine No. 269

when made 1925

Boilers made at Stockton on Tees By whom made Blair & Co Ltd

Boiler No. A192

when made 1925

Registered Horse Power

Owners

Port belonging to

Net Horse Power as per Rule 228

Is Refrigerating Machinery fitted for cargo purposes No

Is Electric Light fitted Yes

GINES, &c.—Description of Engines Triple expansion three cylinder

a. of Cylinders 20 1/2" 33" 54" Length of Stroke 39" Revs. per minute 73 No. of Cylinders 3 No. of Cranks 3

b. of Crank shaft journals as per rule 10.72" Dia. of Crank pin 11" Crank webs Mid. length breadth 17 1/4" Thickness parallel to axis 7" as fitted 11" Mid. length thickness 7" If shrunk Thickness around eye-hole 5 1/16"

c. Diameter of Thrust shaft under collars as per rule 10.72" Diameter of Tunnel shaft as per rule 10.21" Diameter of Screw shaft as per rule 11.48" as fitted 11" as fitted 10 1/2" as fitted 12 3/8" Is the Screw shaft

d. Is the after end of the liner made watertight in the propeller boss Yes

e. If the liner does not fit tightly at the part

f. Is the liner in more than one length are the joints burned One length

g. Is the space charged with a plastic material insoluble in water and non-corrosive

h. Is an approved appliance fitted at the after end of the shaft to permit

i. Is it being efficiently lubricated No Length of Stern Bush 4' 7 1/2" Diameter of Propeller 15' 3"

j. Diameter of Propeller 15' 9" No. of Blades 4 State whether Moveable No Total Surface 69 square feet.

k. of Feed Pumps fitted to the Main Engines 2 Diameter of ditto 3 1/4" Stroke 20" Can one be overhauled while the other is at work Yes

l. of Bilge Pumps fitted to the Main Engines 2 Diameter of ditto 3 1/4" Stroke 20" Can one be overhauled while the other is at work Yes

m. Total number and size of power driven Feed and Bilge Auxiliary Pumps 2 @ 6" x 4" x 6" and 1 @ 8" x 10" x 10"

n. and size of Pumps connected to the Main Bilge Line 1 @ 8" x 10" x 10"

o. and size of Ballast Pumps 1 @ 8" x 10" x 10" No. and size of Lubricating Oil Pumps, including Spare Pump

p. Are two independent means arranged for circulating water through the Oil Cooler No. and size of suctions connected to both Main Bilge Pumps and Auxiliary

q. Pumps;—In Engine and Boiler Room 3 @ 3" and 1 @ 3" Tunnel well and in Holds, &c. Forward hold 2 @ 3"

r. After hold 2 @ 3"

s. and size of Main Water Circulating Pump Bilge Suctions 1 @ 6" No. and size of Donkey Pump Direct Suctions

t. Engine Room Bilges 1 @ 4" Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes Yes

u. Are the Bilge Suctions in the Machinery Space led from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges Yes

v. Are all connections with the sea direct on the skin of the ship Yes Are they Valves or Cocks Both

w. 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 Chain below

x. 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

y. Are Pipes carried through the bunkers None How are they protected

z. Are Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times Yes

aa. Is arrangement of Valves and their connections such as to prevent the possibility of water passing from the sea or from water tanks into the cargo or machinery spaces, or from one

ab. Is the Screw Shaft Tunnel watertight See Hull Rpt Is it fitted with a watertight door Yes worked from Upper Deck

ac. IN BOILERS, &c.—(Letter for record S) Total Heating Surface of Boilers 3947 sq ft

ad. Forced Draft fitted No No. and Description of Boilers 2 single ended Working Pressure 180 lbs

ae. A REPORT ON MAIN BOILERS NOW FORWARDED? Yes

af. A DONKEY BOILER FITTED? No If so, is a report now forwarded?

ag. Are approved plans forwarded herewith for Shafting No Main Boilers Yes Auxiliary Boilers Donkey Boilers

ah. Are approved plans forwarded herewith for Pumping Arrangements Yes Oil Fuel Burning Piping Arrangements

ai. ARE GEAR. State the articles supplied:— 2 Top end bolts & nuts, 2 Bottom end bolts & nuts

aj. main bearing bolts & nuts, 6 Coupling bolts & nuts, 1 set of Bilge

ak. pump valves & seats, 1 set of Feed pump valves & seats,

al. 2 Junk ring studs and nuts, 6 Cylinder studs & nuts, 100 assorted

am. bolts & nuts, 1/2 cut of iron plate, 1/2 cut of iron bars, 50 condenser

an. tubes, 12 Condenser tubes, 12 Boiler tubes, 50 Firebars,

ao. Tube stoppers

ap. The foregoing is a correct description,

aq. FOR SMITH'S DOCK COMPANY, L^{td}

ar. Manufacturer.

as. Engine Works Manager

at. al No. of Visits

au. 21.0.

av. 22.0.

aw. 24.8.13.15

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1924
 May 15. July 7. 14. 17. 22. 24. 28. Aug. 1. 5. 18. Sep. 3. 5. 10. 16. 17. 18. 22. 26. Oct. 2. 7. 10. 13. 18. 20. 22. 24.
 1925
 29. 30. Nov. 3. 5. 7. 8. 12. 13. 14. 17. 19. Dec. 3. Jan. 1.
 During progress of work in shops -
 on board.
 During erection on board vessel - - -
 Total No. of visits 40

Dates of Examination of principal parts - Cylinders 16-9-24 Slides 16-9-24
 Covers 16-9-24 Pistons 2-10-24 Rods 2-10-24
 Connecting rods 2-10-24 Crank shaft 13-8-24 Thrust shaft 2-10-24
 Tunnel shafts 13-8-24 Screw shaft 16-9-24 Propeller 18-10-24
 Stern tube 16-9-24 Engine and boiler seatings 24-10-24 Engines holding down bolts 13-11-24
 Completion of pumping arrangements 13-11-24 Boilers fixed 24-10-24 Engines tried under steam 14-11-24
 Completion of fitting sea connections 13-10-24 Stern tube 18-10-24 Screw shaft and propeller 18-10-24
 Main boiler safety valves adjusted 14-11-24 Thickness of adjusting washers $\frac{9}{16}$ $\frac{5}{16}$ $\frac{5}{16}$ $\frac{7}{16}$
 Material of Crank shaft Ingot steel Identification Mark on Do. 861
 Material of Thrust shaft Ingot steel Identification Mark on Do. 863
 Material of Tunnel shafts Ingot steel Identification Marks on Do. 862 ABC & D
 Material of Screw shafts Ingot steel Identification Marks on Do. 864
 Material of Steam Pipes Solid Drawn Copper Test pressure 360 lbs Date of Test 7-11-24
 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 the Rules for carrying and burning oil fuel been complied with
 Is this machinery duplicate of a previous case Yes If so, state name of vessel SS CHILTON Smiths Co 267

General Remarks (State quality of workmanship, opinions as to class, &c. The machinery of this vessel has been built under special survey. The material and workmanship are sound and good. The engines, boilers, and auxiliaries were examined under steam and all found satisfactory. The machinery is now in a good and safe working condition and renders the vessel eligible in my opinion to have the notation *LMC 1.25 in the Register Book.
 Note, This vessel is fitted with electric light and wireless.

It is submitted that
 this vessel is eligible for
 THE RECORD. + LMC 1.25. CL.

JWD.
 2/1/24
 P. 1

The amount of Entry Fee ... £ 4 : 0 :
 Special ... £ 30 : 14 :
 Donkey Boiler Fee ... £ : :
 Travelling Expenses (if any) £ : :
 When applied for, 21.12.1924
 When received, 1.1.25

Committee's Minute FRI. 2 JAN 1925
 Assigned + Lmb. 1.25

Arthur W. Oxford
 Engineer Surveyor to Lloyd's Register of Shipping.