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No. 12255

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY

Received at London Office

29 SEP 1949

Date of writing Report 22nd Sep. 1949. When handed in at Local Office 27th Sep. 1949 Port of MIDDLESBROUGH
 No. in Survey held at MIDDLESBROUGH. Date, First Survey 26th July, 1948 Last Survey 21st Sept. 1949
 Reg. Book. on the t.s.s. "GEMMA" (Number of Visits 58)
 Built at Sunderland By whom built J.L. Thompson & Co. Ltd. Yard No. 663 When built 1949
 Engines made at South Bank By whom made Smith's Dock Co. Ltd. Engine No. 650 when made 1949
Glasgow By whom made Babcock & Wilcox Ltd. Engine No. 671957 when made 1948
Greenock By whom made John G. Kincaid & Co. Boiler No. 349 when made 1948
 Registered Horse Power 730 M.N. Owners Anglo Saxon Petroleum Co. Port belonging to Hauge
 Nom. Horse Power as per Rule 730 M.N. Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes
 Trade for which Vessel is intended Tanker

ENGINES, &c.—Description of Engines Steam Reciprocating Twin Screw Revs. per minute 90
 Dia. of Cylinders 21 1/2", 36", 61" Length of Stroke 39" No. of Cylinders 3 each engine No. of Cranks 3 each engine
 Crank shaft, dia. of journals 11.94" as per Rule 11.94" Crank pin dia. 11.03" Crank webs Mid. length breadth 11.9" Thickness parallel to axis 6" L.P. 8"
 as fitted 11.03" Mid. length thickness 11.9" Thickness around eye-hole 5.5/8"
 Intermediate Shafts, diameter as per Rule 11.39" Thrust shaft, diameter at collars as per Rule 11.94"
 as fitted 12.3" as fitted 12.3"

Tube Shafts, diameter as per Rule 12.34" Is the tube screw shaft fitted with a continuous liner Yes
 as fitted 12.34" as fitted 12.34" Is the after end of the liner made watertight in the propeller boss Yes
 Bronze Liners, thickness in way of bushes as per Rule 11/16" Thickness between bushes as per Rule 17/32"
 as fitted 23/32" Frd. as fitted 17/32"

Propeller, dia. 14'0" Pitch 4 No. of Blades 4 Material Bronze whether Movable Solid Total Developed Surface 72.4 sq. feet
 Feed Pumps worked from the Main Engines, No. None Diameter 7 1/2" Stroke 6 1/2" Can one be overhauled while the other is at work Yes
 Bilge Pumps worked from the Main Engines, No. 1 each Diameter 7 1/2" Stroke 6 1/2" Can one be overhauled while the other is at work Yes

Feed Pumps No. and size 2 - 13 1/2" x 12" x 24" Pumps connected to the Main Bilge Line No. and size 1 - 10" x 12" x 12", 2 - 7 1/2" x 6"
 How driven Independent steam Weirs How driven 1 - Independent steam, 2 main engines
 Ballast Pumps, No. and size 1 - 10" x 12" x 12" Lubricating Oil Pumps, including Spare Pump, No. and size 1 - 2"
 Are two independent means arranged for circulating water through the Oil Cooler Yes Suctions, connected to both Main Bilge Pumps and Auxiliary
 Bilge Pumps;—In Engine and Boiler Room 3-3" Bilge suction 1-2" cofferdam suction 2-2" oily gutterway suction
 In Holds, &c. Fore peak 1-6" Aft peak 2-4" fore hold 1-2" 8" (R)

Main Water Circulating Pump Direct Bilge Suctions, No. and size 1 - 11" Independent Power Pump Direct Suctions to the Engine Room Bilges,
 No. and size 1 - 4" Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes Yes
 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
 Are all Sea Connections fitted direct on the skin of the ship Yes Are they fitted with 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 Overboard Discharges above or below the deep water line below
 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 pass through the bunkers None How are they protected None
 What pipes pass through the deep tanks None Have they been tested as per Rule Yes
 Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times Yes
 Is the 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 compartment to another Yes Is the Shaft Tunnel watertight Yes Is it fitted with a watertight door worked from

MAIN BOILERS, &c.—(Letter for record) Total Heating Surface of Boilers 10,640 sq. ft.
 Is Forced Draft fitted Yes No. and Description of Boilers 2 water tube Working Pressure 220 lbs per sq. in.

IS A REPORT ON MAIN BOILERS NOW FORWARDED? Yes
 IS A DONKEY BOILER FITTED? No If so, is a report now forwarded? No

PLANS. Are approved plans forwarded herewith for Shafting No Main Boilers No Auxiliary Boilers No Donkey Boilers No
 Superheaters No General Pumping Arrangements No Oil fuel Burning Piping Arrangements No

SPARE GEAR. State the articles supplied:— (plans retained duplicate case)
To Rule requirements

The foregoing is a correct description,

FOR SMITH'S DOCK CO. LTD.
W. Warley
ENGINE WORKS MANAGER

23rd Sept. 49 Manufacturer.



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NOTE.—The words which do not apply should be deleted.

1948. July 26, Aug. 18, Oct. 21, Nov. 19, 22, 1949. Jan. 5, 6, 14, 18, 21, 24, 25, 27, 31
 Feb. 3, 10, 14, 16, 17, 21, 22, 24, Mar. 1, 2, 3, 4, 8, 9, 10, 28, Apr. 4, May 19, 20, 24,
 June 7, 17, 22, 23, 28, 30, July 4, 5, 12, 13, Aug. 11, 12, 15, 23, 25, 31 Sept. 6, 7, 8, 12, 13,
 15, 20, 21.

Dates of Survey while building: During progress of work in shops - - -
 During erection on board vessel - - -
 Total No. of visits 58

Dates of Examination of principal parts—Cylinders 6.1.49, 18.1.49, Slides 14.1.49, 10.3.49 Covers 16.2.49 & 9.3.49
 Pistons 5.1.49, 23.2.49 Piston Rods 5.1.49, 27.1.49 Connecting rods 5.1.49, 10.2.49, 4.3.49
 Crank shaft 17.2.49 Thrust shaft 30.6.49, 4.7.49 Intermediate shafts 30.6.49 & 4.7.49
 Tube shaft - Screw shaft 5.3.49, 19.5.49 & 20.5.49 Propeller 3.3.49, 19.5.49, & 20.5.49
 Stern tube 19.11.49 Engine and boiler seatings 19.5.49 Engines holding down bolts 30.6.49
 Completion of fitting sea connections 1.5.49 (Sta)
 Completion of pumping arrangements 13.9.49 (Sta) Boilers fixed 22.6.49 Engines tried under steam 13.9.49 & 20.9.49 (Sta)
 Main boiler safety valves adjusted 13.9.49 (Sta) Thickness of adjusting washers P. Blms. P.V. 13/32" S.V. 5/8" Star Blr. 25/
 Crank shaft material OH Steel Identification Mark J.C. B Star 2318 to 2321 Thrust shaft material OH Steel Identification Mark Star 2642 J
 Intermediate shafts, material OH Steel Identification Marks Port 2644 A.W.O Tube shaft, material - Identification Mark -
 Screw shaft, material OH Steel Identification Mark Star 2645 A.W.O & J.C.B. Star 2646 Steam Pipes, material OH Steel Test pressure 675 Date of Test 24.5.49
 Is an installation fitted for burning oil fuel Yes Is the flash point of the oil to be used over 150° F. 17.6.49 & 13.7.49 Yes
 Have the requirements of the Rules for carrying and burning oil fuel been complied with Yes
 Is this machinery duplicate of a previous case Yes If so, state name of vessel ("Gomphina", "Gari" & "Gena")

General Remarks (State quality of workmanship, opinions as to class, &c.)
 These engines and boilers have now been fitted in this vessel in accordance with the approved
 plans and Rule requirements and on completion the machinery was tried out under working
 conditions and found satisfactory.
 This vessel, in our opinion, is now eligible for the record of U.M.C. 9.49 and notation of T.S.
 (CL) 9.49 fitted for burning oil fuel 9.49, (F.P. above 150 F) fitted forced draught.

The amount of Entry Fee ... £ 132: 12 -
 3/5 Special ... £ : :
 Donkey Boiler Fee ... £ : :
 Travelling Expenses (if any) £ : :
 When applied for, 28-9-1949
 When received, 19.....

For C. E. Booker
 self E. Howey
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute
 Assigned + hmc 9 49



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