

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY

No. 15965

Date of writing Report 5-11-26 When handed in at Local Office 10 Port of Rotterdam Received at London Office 15 DEC 1926
No. in Survey held at Rotterdam & Schevdam Date, First Survey March 16 Last Survey 30th Nov. 1926
Reg. Book. on the S.S. Phay Gran (Number of Visits 41)

Built at Schevdam By whom built Milton's Eng & Slipway Comp Yard No. 312 Gross Tons Net Tons
Engines made at Rotterdam By whom made Milton's Eng & Slipway Comp Engine No. 440 When built 1926
Boilers made at Rotterdam By whom made Milton's Eng & Slipway Comp Boiler No. 757/56 when made 1926
Registered Horse Power Owners Harap Eng & Steamship Comp Port belonging to Singapore
Nom. Horse Power as per Rule 202 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes
Trade for which Vessel is intended

ENGINES, &c.—Description of Engines Vertical Single expansion
Dia. of Cylinders 19 x 32 x 51 Length of Stroke 36 No. of Cylinders 3 Revs. per minute 90
Crank shaft, dia. of journals as per Rule 9.40 as fitted 10 1/4 Crank pin dia. 10 1/4 No. of Cranks 3
Intermediate Shafts, diameter as per Rule 9.40 as fitted 9 3/4 Crank webs Mid. length breadth 15 Thickness parallel to axis 6 3/8
Tube Shafts, diameter as per Rule as fitted Screw Shaft, diameter as per Rule 10.95 as fitted 11 7/16 - 11 9/16 Is the tube screw shaft fitted with a continuous liner Yes
Bronze Liners, thickness in way of bushes as per Rule as fitted 5/16 Thickness between bushes as per Rule as fitted 7/16 Is the after end of the liner made watertight in the propeller boss Yes
If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner One length
If two liners are fitted, is the shaft lapped or protected between the liners Is an approved Oil Gland or other appliance fitted at the after end of the tube shaft
Propeller, dia. 13 9/16 Pitch 13 9/16 No. of Blades 4 Material Cast iron whether Moveable No Total Developed Surface 61 sq. feet
Feed Pumps worked from the Main Engines, No. 2 Diameter 3 1/2 Stroke 12 1/2 Can one be overhauled while the other is at work Yes
Bilge Pumps worked from the Main Engines, No. 2 Diameter 3 1/2 Stroke 12 1/2 Can one be overhauled while the other is at work Yes
Feed Pumps No. and size 12 6 x 4 1/2 x 6 How driven Steam Pumps connected to the Main Bilge Line No. and size 3: 6 x 4 1/2 x 6 5/8 x 7 1/2 x 9 x 7 1/2 How driven Steam
Ballast Pumps, No. and size 12 7 1/2 x 9 x 7 1/2 Lubricating Oil Pumps, including Spare Pump, No. and size
Are two independent means arranged for circulating water through the Oil Cooler
Bilge Pumps;—In Engine and Boiler Room 4 a 2 3/4 Suctions, connected to both Main Bilge Pumps and Auxiliary
In Holds, &c. 2 a 2 3/4 No 1 hold; 2 a 2 3/4 Dry tank; 2 a 2 3/4 No 2 hold; 1 a 2 3/4 in the tunnel

Main Water Circulating Pump Direct Bilge Suctions, No. and size 1 a 5" Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 1 a 3"
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 stowhold plates Yes Are the Overboard Discharges 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 pass through the bunkers Bilge pipes How are they protected Lumberboards
What pipes pass through the deep tanks 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 Yes worked from Eng platform

MAIN BOILERS, &c.—(Letter for record) Total Heating Surface of Boilers 3570 sq. ft.
Is Forced Draft fitted No No. and Description of Boilers 2 S.E. Multitubular Working Pressure 100 lbs.
IS A REPORT ON MAIN BOILERS NOW FORWARDED? Yes
IS A DONKEY BOILER FITTED? No If so, is a report now forwarded?

PLANS. Are approved plans forwarded herewith for Shafting 15-2-26 Main Boilers 23-11-25 Auxiliary Boilers Donkey Boilers
Superheaters General Pumping Arrangements 15-2-26 Oil fuel Burning Piping Arrangements

SPARE GEAR. State the articles supplied:—
1 set of coupling bolts (6)
2 main bearing bolts
2 piston rod top end bolts
2 connecting rod bottom end bolts
1 set of Bilge and feed pump valves
1 set of springs for the F.P. and M.P. cylinder
50 assorted bolts and nuts for the Engine and Boilers
1 Propeller, 1 screw shaft, 1 complete set of top and bottom end brasses
1 Piston rod for air pump, 1 piston rod for circulating pump
2 springs for Safety valves.

The foregoing is a correct description,
WILTON'S ENGINEERING & SLIPWAY CO.
J. J. Milton Manufacturer.



W1233-0010

ded and a List of
Water Capacity
Tons
6
5.9
18/5
16-21/19
56

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

March 16-22; April 3-21; May 11-20-31; June 5-13-30
 July 1-7-19-26; 29-30; Aug: 3-4-5-6-12-14-23-27
 Sept: 17-14 Oct 2-5-15-23-27 Nov: 1-2-3-5-9
 During erection on board vessel --- Nov: 10-12-22-25-29-30
 Total No. of visits 41.

Dates of Examination of principal parts—Cylinders April 3-21 May 10-31 Slides May 11-31 Covers May 21-31
 Pistons June 5-23 July 7. Piston Rods June 5-2. Connecting rods July 7-19.
 Crank shaft Aug 3-5-12-27-24-24 Thrust shaft Aug 3-5-12-24 April 24 Intermediate shafts Aug 3-5-19-27 April 24
 Tube shaft --- Screw shaft Aug 3-5-27. Propeller Aug 12-23.
 Stern tube July 7-19-26 Engine and boiler seatings Oct 2-15-27 Engines holding down bolts Nov: 2-5
 Completion of fitting sea connections Nov: 5-9.
 Completion of pumping arrangements Nov: 22-25 Boilers fixed Nov: 25-30 Engines tried under steam 29-11-26
 Main boiler safety valves adjusted 30-11-26 Thickness of adjusting washers Port 3/16" - 1/2" Starboard 1/2" - 17/32"
 Crank shaft material S.M. Steel Identification Mark No 71; KK 24-9-26 Thrust shaft material S.M. Steel Identification Mark No 72; KK 24-9-26
 Intermediate shafts, material S.M. Steel Identification Marks No 72; KK 24-9-26 Tube shaft, material --- Identification Mark ---
 Screw shaft, material S.M. Steel Identification Mark No 72; KK 24-9-26 Steam Pipes, material Copper Test pressure 400 lb. Date of Test ---
 Is an installation fitted for burning oil fuel --- 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 "Kiang Gran"

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

The machinery of this vessel has been constructed under Special Survey, the materials and workmanship are of good quality, it has been securely fitted on board tried under steam and found satisfactory.
 The vessel is in my opinion eligible to be classed in the register book with the record of L.M.C. 11-26

It is submitted that this vessel is eligible for THE RECORD. + L.M.C. 11. 26. CL.

JWD. 17/12/26
 JRSK

The amount of Entry Fee ... £ 440.00
 Special ... £ 1606.00
 Donkey Boiler Fee ... £ : :
 Travelling Expenses (if any) £ 115.00

When applied for, 19
 When received, 20.12.26

M. M. M. M.
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI. 17 DEC 1926
 Assigned + L.M.C. 11-26

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

CERTIFICATE WRITTEN

