

Rpt. 4.

# REPORT ON STEAM RECIPROCATING ENGINE MACHINERY

No. 15965

Date of writing Report 5-11-1926 When handed in at Local Office

Received at London Office 15 DEC 1926

No. in Survey held at Rotterdam & Schiedam Date, First Survey March 16 Last Survey 30<sup>th</sup> Nov. 1926  
Reg. Book. on the S.S. Phay Gwan (Number of Visits 41)

Built at Schiedam By whom built Milton's Eng & Ship Comp Yard No. 311 Tons { Gross 1426 Net 1426  
Engines made at Rotterdam By whom made Milton's Eng & Ship Comp Engine No. 440 when made 1926  
Boilers made at Rotterdam By whom made Milton's Eng & Ship Comp Boiler No. 155 when made 1926  
Registered Horse Power Owners Harap Eng & Ship 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 19x32x51 Length of Stroke 36 No. of Cylinders 3 Revs. per minute 90  
Crank shaft, dia. of journals as per Rule 9.40 as fitted 10.14 Crank pin dia. 10.14 No. of Cranks 3  
Intermediate Shafts, diameter as per Rule 9.40 as fitted 9.34 Crank webs Mid. length breadth 15 Mid. length thickness 0.75 Thickness parallel to axis 0.75 Thickness around eye-hole 4.75  
Tube Shafts, diameter as per Rule as fitted Screw Shaft, diameter as per Rule 10.93 as fitted 11.76-11.86 Is the tube screw shaft fitted with a continuous liner Yes  
Bronze Liners, thickness in way of bushes as per Rule as fitted 5/8 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 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 Put high up  
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 Pitch 13.9 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 1/2 x 4 1/2 x 6 How driven Steam Pumps connected to the Main Bilge Line { No. and size 3 1/2 x 4 1/2 x 6 5/8 x 9 x 7 1/2 How driven Steam  
Ballast Pumps, No. and size 12 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 1/2 x 1 1/2 Suctions, connected to both Main Bilge Pumps and Auxiliary  
In Holds, &c. 3 1/2 x 1 1/2 No 1 hold; 3 1/2 x 1 1/2 No 2 hold; 3 1/2 x 1 1/2 No 3 hold; 10 1/2 x 1 1/2 in the tunnel

**Main Water Circulating Pump Direct Bilge Suctions, No. and size 1 1/2 x 3**  
No. and size 1 1/2 x 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 fitted 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 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 Limbboards  
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

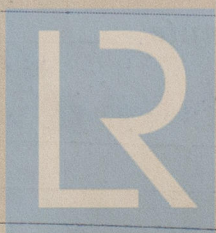
**MAIN BOILERS, &c.**—(Letter for record) Total Heating Surface of Boilers 3570  
Is Forced Draft fitted No No. and Description of Boilers 2 S.C. Multitubular Working Pressure 100 lbs.  
**IS A REPORT ON MAIN BOILERS NOW FORWARDED?** Yes  
**IS A DONKEY BOILER FITTED?** No If so, is a report now forwarded?  
**PLANS.** Are approved plans forwarded herewith for Shafting 15-2-26 Main Boilers 23-11-25 Auxiliary Boilers Donkey Boilers  
(If not state date of approval)  
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 S.C. and M. Cylinder  
50 assorted bolts and nuts for the Engine and Boilers  
1 Propeller, 1 screw shaft, 1 complete set of top and bottom end braggies  
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 & SHIPWAY CO.

Manufacturer.



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Lloyd's Register Foundation

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March 16-22; April 3-21; May 11-20-31; June 5-13-30  
During progress of work in shops - -  
July 1-7-19-26; 29-30; Aug. 3-4-5-6-12-19-23-27  
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 Thrust shaft Aug 3-5-12-24 Intermediate shafts Aug 3-5-19-27-24  
Tube shaft Tube 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 715 HK 24-26 Thrust shaft material S.M. Steel Identification Mark NO 715 HK 24-26  
Intermediate shafts, material S.M. Steel Identification Marks NO 715 HK 24-26 Tube shaft, material S.M. Steel Identification Mark NO 715 HK 24-26  
Screw shaft, material S.M. Steel Identification Mark NO 715 HK 24-26 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  
JRK

The amount of Entry Fee ... £ 44.0.00  
Special ... £ 606.00  
Donkey Boiler Fee ... £  
Travelling Expenses (if any) £ 15.00.  
When applied for, 19  
When received, 20.12.26

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

Committee's Minute

FRI. 17 DEC 1926

Assigned

+ L.M.C. 11-26 C.L.

CERTIFICATE WRITTEN



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