

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY,

Received at London Office 22 MAY 1928

Date of writing Report **Apr. 18th. 28.** When handed in at Local Office **Apr. 18th. 28.** Port of **Hong Kong**

No. in Survey held at **Hong Kong** Date, First Survey **Jan. 4th. 1928** Last Survey **Apr. 17th. 1928**

Reg. Book. on the **Single Screw Steamer "CHIRM UNOM PHOL."** (Number of Visits **17**)

Built at **Hong Kong** By whom built **W. S. Bailey & Co. Ltd.** Yard No. **243** Tons { Gross **97-24**
Net **27-58**

Engines made at **Stockton** By whom made **Harner & Sons** Engine No. **266** When built **1928**

Boilers made at **Stockton** By whom made **Riley Bros.** Boiler No. **5757** when made **1927**

Registered Horse Power Owners **The Srisacha Co. Ltd.** Port belonging to **Bangkok, Siam.**

Nom. Horse Power as per Rule **41.2** Is Refrigerating Machinery fitted for cargo purposes **No** Is Electric Light fitted **Yes**

Trade for which Vessel is intended **Towing services in Bangkok River.**

ENGINES, &c. — Description of Engines **Triple Expansion Surface Condensing** Revs. per minute **179**

Dia. of Cylinders **9 1/2", 15", 24"** Length of Stroke **18"** No. of Cylinders **3** No. of Cranks **3**

Crank shaft, dia. of journals as per Rule **4.65** as fitted **4.75** Crank pin dia. **4 1/2"** Crank webs Mid. length breadth **3 1/2"** shrunk Thickness parallel to axis **-**
Mid. length thickness **3 1/2"** Thickness around eye-holes **-**

Intermediate Shafts, diameter as per Rule **4.41** as fitted **4 1/2"** Thrust shaft, diameter at collars as per Rule **4.63** as fitted **4 1/2"**

Tube Shafts, diameter as per Rule **-** as fitted **-** Screw Shaft, diameter as per Rule **4.94** as fitted **5 1/2"** Is the shaft filled with a continuous liner **Yes**

Bronze Liners, thickness in way of bushes as per Rule **.44"** as fitted **1/2"** Thickness between bushes as per Rule **.33"** 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 **Yes**

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 **-**

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 **-**

Length of Bearing in Stern Bush next to and supporting propeller **20 1/2"**

Propeller, dia. **6'-3"** Pitch **6'-0"** No. of Blades **4** Material **Cast Iron** whether Moveable **Fixed** Total Developed Surface **12-02** sq. feet

Feed Pumps worked from the Main Engines, No. **1** Diameter **2"** Stroke **7 1/2"** Can one be overhauled while the other is at work **-**

Bilge Pumps worked from the Main Engines, No. **1** Diameter **2 1/2"** Stroke **7 1/2"** Can one be overhauled while the other is at work **-**

Feed Pumps { No. and size **1-2"x7 1/2"** | **1-4 1/2"x3"x5** Hor. Duplex. | Pumps connected to the { No. and size **1-2 1/2"x7 1/2"** | **1-4 1/2"x3"x5** Hor. Duplex.
How driven **Main Engine** | **Independent Steam** | Main Bilge Line | **Main Engine** | **Independent Steam**

Ballast Pumps, No. and size **-** Lubricating Oil Pumps, including Spare Pump, No. and size **-**

Are two independent means arranged for circulating water through the Oil Cooler **-** Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge Pumps; — In Engine and Boiler Room **2 - 2" in E.R., 1 - 2" in E.R.**

In Holds, &c. **1 - 2" Forward, & 1 - 2" Aft.**

Main Water Circulating Pump Direct Bilge Suctions, No. and size **1 - 2"** Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size **1 - 2"** 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 **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 **-**

What pipes pass through the deep tanks **None** Have they been tested as per Rule **-**

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 **No tunnel** Is it fitted with a watertight door **-** worked from **-**

MAIN BOILERS, &c. — (Letter for record **S**) Total Heating Surface of Boilers **870** sq. ft.

Is Forced Draft fitted **No** No. and Description of Boilers **1 - S.E. Marine** Working Pressure **180 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 **-** Main Boilers **-** Auxiliary Boilers **-** Donkey Boilers **-**

(If not state date of approval)

Superheaters **-** General Pumping Arrangements **Kobe June 9th. 1927.** Oil fuel Burning Piping Arrangements **-**

SPARE GEAR. State the articles supplied:—

- Two connecting rod top end bolts and nuts. ✓
- Two connecting rod bottom end bolts and nuts. ✓
- Two main bearing bolts. ✓
- One set coupling bolts. ✓
- One set of feed and bilge pump valves. ✓
- One set of piston springs for each cylinder. ✓
- A quantity of assorted bolts and nuts. ✓
- Iron of various sizes. ✓
- Usual spanners and tools. ✓

The foregoing is a correct description,
For **W. S. BAILEY & Co., Ltd.**

W. S. Bailey
Managing Director

Manufacturer.



Im 10/24. T.

1927
 Jul. 29, Aug. 9, Sept. 13, 26, Oct. 6, 14, 26, Nov. 4, Stockton.

During progress of work in shops - - 1928
 Jan. 4th, 13, 15, 25, Feb. 6 & 14, Hong Kong.

Dates of Survey while building - - - During erection on board vessel - - - 1928
 Feb. 18th, 23, 27, Mar. 8, 15, 22, 28, Apr. 3, 11, 13 & 17.

Total No. of visits Stockton 8. Hong Kong 17.

Dates of Examination of principal parts—Cylinders	12-9-27	Slides	26-9-27	Covers	12-9-27
Pistons	12-9-27	Piston Rods	9-8-27	Connecting rods	9-8-27
Crank shaft	26-9-27	Thrust shaft	26-10-27	Intermediate shafts	26-10-27 & 14-3-28
Tube shaft	-	Screw shaft	26-10-27 & 14-3-28	Propeller	14-3-28
Stern tube	13-1-28	Engine and boiler seatings	19-1-28	Engines holding down bolts	8-3-28
Completion of pumping arrangements	22-3-28	Boilers fixed	28-3-28	Engines tried under steam	13-4-28
Main boiler safety valves adjusted	11-4-28	Thickness of adjusting washers	P. 11" 32 S. 5" 16		
Crank shaft material	Steel	Identification Mark	Lloyd's No. 1301	Thrust shaft material	Steel
Intermediate shafts, material	Steel	Identification Marks	Lloyd's No. 7896	Tube shaft, material	-
Screw shaft, material	Steel	Identification Mark	Lloyd's No. 7896	Steam Pipes, material	S. D. Copper
Is an installation fitted for burning oil fuel	No	Is the flash point of the oil to be used over 150°F.	-	Test pressure	360 lbs
Have the requirements of the Rules for carrying and burning oil fuel been complied with	-	Date of Test	28-3-28		
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 materials have been tested by the Surveyors to this Society and these engines have been built under special survey at Stockton in accordance with the Rules and approved plans. (See Middlesbrough Report No. 13102).

The machinery has now been installed on board this vessel in accordance with the Rules and the workmanship is good.

Full power trials were run over a measured course and the machinery worked satisfactorily. Speed of vessel 9.6 knots at 179 revs. per min. I.H.P. 230.

It is recommended that the vessel be classed with Lloyd's Machinery Certificate and the record of L.M.C. 4.28, be made in the Register Book.

It is submitted that this vessel is eligible for THE RECORD, L.M.C. 4.28
 C-L.

T.30y 9 1/2", 15 1/2" 24"-15"
 180 1/2 39 NHP (5)
 15B. 2pf. GS. 34 H.S. 870. Elec. LIGHT.
 HARKER & SONS, STOCKTON.

The amount of Entry Fee ... £ : When applied for, 17/4/ 19 28

Installation Special full fee £ 6. = \$59.50 :
 Electric Light ... £ 6. = \$59.50 :
 Travelling Expenses (if any) £ 25.00 :
 \$144.00.
 FRI. 25 MAY 1928

J. L. Morrison
 Engineer Surveyor to Lloyd's Register of Shipping.

TUE. 12 MAR 1929

Committee's Minute

Assigned + R.M.C. 4.28
 C-L

CERTIFICATE WRITTEN: TUE. 16 OCT 1929
 FRI. 15 NOV 1929

