

REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office 17 JUL 1930

Date of writing Report 16 When handed in at Local Office 15/7/1930 Port of Newcastle-on-Tyne

No. in Survey held at Hallsend-on-Tyne Date, First Survey 13 Feb Last Survey 8-4-1930
 Reg. Book. on the New Steel S.S. "Pendopo" (Number of Visits 36)

Built at Yssel By whom built C. van der Giessen & Zonen Yard No. 609 Tons Gross Net
 Engines made at Hallsend By whom made North Eastern Mar & Coal Engine No. 2433 When built 1930
 Boilers made at Hallsend By whom made North Eastern Mar & Coal Boiler No. 2433 when made 1930

Registered Horse Power _____ Owners _____ Port belonging to _____

Nom. Horse Power as per Rule 548 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted yes

Trade for which Vessel is intended Carrying petroleum in bulk. Ocean going.

ENGINES, &c.—Description of Engines Triple expansion Revs. per minute 45

Dia. of Cylinders 25" x 42" x 42" Length of Stroke 48" No. of Cylinders 3 No. of Cranks 3

Crank shaft, dia. of journals 14.34 as per Rule 14.5/8 as fitted Crank pin dia. 14.5/8 Crank webs Mid. length breadth 2-1" Thickness parallel to axis 9"
 Mid. length thickness 9" shrunk Thickness around eye-hole 9 13/16"

Intermediate Shafts, diameter as per Rule 13.66 as fitted 13 7/8 Thrust shaft, diameter at collars as per Rule 14.34 as fitted 14.5/8

Tube Shafts, diameter as per Rule _____ as fitted Screw Shaft, diameter as per Rule 15.18 as fitted 15 1/2 Is the tube shaft fitted with a continuous liner yes

Bronze Liners, thickness in way of bushes as per Rule .461 as fitted 15/16 Thickness between bushes as per Rule .57 as fitted 15/16 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 ✓

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 ✓

Propeller, dia. 14-6" Pitch 18-10" No. of Blades 4 Material Bronze whether Moveable yes Total Developed Surface 98 sq. feet

Feed Pumps worked from the Main Engines, No. none Diameter ✓ Stroke ✓ Can one be overhauled while the other is at work ✓

Bilge Pumps worked from the Main Engines, No. _____ Diameter ✓ Stroke ✓ Can one be overhauled while the other is at work ✓

Feed Pumps { No. and size 2 @ 8 x 10 1/2 x 22 + 1 @ 8 x 10 1/2 x 22 Pumps connected to the Main Bilge Line { No. and size 3 @ 9 x 6 x 10
 How driven Steam How driven Steam

Ballast Pumps, No. and size 1 @ 9 x 6 x 10 Lubricating Oil Pumps, including Spare Pump, No. and size none

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 @ 3" E.R. / 3 @ 3" Stokehold / 1 @ 3" aft well.

In Holds, &c. Carrying petroleum in bulk. See Rotterdam report.

Main Water Circulating Pump Direct Bilge Suctions, No. and size 1 @ 10" Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size _____

Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes ✓

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 ✓

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 none Is it fitted with a watertight door ✓ worked from ✓

MAIN BOILERS, &c.—(Letter for record S.) Total Heating Surface of Boilers 4665

Is Forced Draft fitted yes No. and Description of Boilers Three single ended. Working Pressure 225 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 No Main Boilers yes Auxiliary Boilers ✓ Donkey Boilers ✓

(If not state date of approval)

Superheaters none General Pumping Arrangements yes Oil fuel Burning Piping Arrangements yes

SPARE GEAR. State the articles supplied:— one propeller shaft, 2 propeller blades 1 set studs + nuts for one propeller blade 1 top & hot end bearing, 1 slide rod, 1 set HP pump piston rod packing, 1 set coach springs for P piston, 1 set HP piston & packing, 1 set ahead thrust pads, 2 sets each bolts & nuts for top & bottom ends & main bearings 1 set crushing bolts + nuts, 12 junk pin bolts 1 ecc. strap, 6 cyl cover studs + nuts for each size 1 spring each size, 3 main & aux check valve lids, 3 scum & blow down valve lids & safety valve springs, 2 main & aux check valve spindles, 1 scum & blow down valve spindles, 1 set feeds bilge valves, complete set spares for all pumps including oil fuel & transfer pumps, etc. Quantity of assorted bolts nuts & iron.

THE NORTH EASTERN MARINE ENGINEERING CO., LTD.
 The foregoing is a correct description,
Alan Dobbie
 SECRETARY.

Manufacturer.



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

1930
Feb. 13-19. Mar. 20-25. Apr. 4-9. 11-25. May 7-13. 14-15. 16-19. 21-22. 26-27. 28-29. 30.

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

June 3. 4. 6. 7. 10. 11. 12. 16. 17. 19. 20. 23. 30. July 4. 8.

36.

Dates of Examination of principal parts—Cylinders	26-5-30	Slides	8-5-30	Covers	26-5-30.
Pistons	8-5-30	Piston Rods	24-5-30	Connecting rods	24-5-30
Crank shaft	4-5-30	Thrust shaft	8-5-30	Intermediate shafts	4-5-30
Tube shaft	✓	Screw shaft	28-5-30	Propeller	29-5-30
Stern tube	15-5-30	Engine and boiler seatings	see Rotterdam report	Engines holding down bolts	23-6-30.
Completion of fitting sea connections			see Rotterdam Report.		
Completion of pumping arrangements	11-4-30.	Boilers fixed	30-6-30.	Engines tried under steam	11-4-30
Main boiler safety valves adjusted	11-4-30.	Thickness of adjusting washers	P.B. P+S 3/8", C.B. P+S 1/2", S.B. P 1 1/2" S 1/2"		
Crank shaft material	O.H. Steel	Identification Mark	2433 W.B.	Thrust shaft material	O.H. Steel Identification Mark 3358 W.B.
Intermediate shafts, material	O.H. Steel	Identification Marks	3358 R.W.F.	Tube shaft, material	✓ Identification Mark ✓
Screw shafts, material	O.H. Steel	Identification Mark	3405 R.W.F. W.B.	Steam Pipes, material	S.D. Steel Test pressure 6 1/2 lbs Date of Test 11-6-30 to 23-6-30
Is an installation fitted for burning oil fuel	yes.	Is the flash point of the oil to be used over 150°F.	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	no	If so, state name of vessel	✓		

General Remarks (State quality of workmanship, opinions as to class, &c.)
 The Machinery of this vessel has been built under Special Survey. Materials & workmanship good. Hydraulic tests satisfactory. The whole of the machinery has been efficiently installed and fixed in place and tried under steam & is in good & safe working condition and eligible in my opinion to be classed and have records. ✕ L.M.C. 7-30. Yail shaft C.L. Fitted for oil fuel 4-30. Flash Point above 150°F. in the Register Book.

It is submitted that this vessel is eligible for THE RECORD. + L.M.C. 7.30 C-L F.D Fitted for oil fuel (7.30) F.P. above 150°F.

W. J. 18/7/30.

Newcastle-on-Tyne

The amount of Entry Fee	£ 6 - -	When applied for,	16 JUL 1930
Special	£ 102 - 8 0		
Donkey Boiler Fee	£ ✓	When received,	22.7.1930
Travelling Expenses (if any)	£ ✓		

William Dulles.
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute TUE. 22 JUL 1930

Assigned + L.M.C. 7.30 C.L. F.D., Fitted for oil fuel 7.30 F.P. above 150°F. (+ see Rot. 38 19474)



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