

REPORT ON OIL ENGINE MACHINERY

No. 7074

19 Apr 1926

Date of writing Report Mar 29th 1926 When handed in at Local Office Apr 14 1926 Port of TRIESTE
 No. in Survey held at TRIESTE Date, First Survey Feb 17th, 1925 Last Survey Mar 31st 1926
 Reg. Book. Number of Visits 167
 39004 on the Single Twin Triple Screw vessels "FELLA" Tons Gross 706.48
Net 446.42
 Built at Trieste By whom built Italieno Socio Smerino Yard No. 745 When built 1926
 Engines made at Trieste By whom made " Engine No. 5001 When made 1926
 Donkey Boilers made at Auman By whom made Bochum & Co Boiler No. 9406 When made 1925
 Brake Horse Power 489 Owners Hangayon Lina Smerino & Co Port belonging to Venice
 Is Refrigerating Machinery fitted for cargo purposes Yps. Is Electric Light fitted Yps.

ENGINES, &c.—Type of Engines Brunswick & Wain Diesel 2 or 4 stroke cycle 4 Single or double acting Single
 Maximum pressure in cylinders 35 kg/cm² No. of cylinders 6 Diameter of cylinders 140 No. of cranks 6 Length of stroke 1500
 Distance of bearings, adjacent to the Crank, measured from inner edge to inner edge 1004 Is there a bearing between each crank Yps.
 Revolutions per minute 95 Flywheel dia. 3360 Weight 18600 Means of ignition Compression Kind of fuel used Diesel oil
 Crank Shaft, dia. of journals as per Rule 470 Crank pin dia. 472 Crank Webs Mid. length breadth 450 Thickness parallel to axis 310
as fitted 472 Mid. length thickness 310 shrunk Thickness around eye hole 195
 Propeller Shafts, diameter as per Rule 470 Intermediate Shafts, diameter as per Rule 316 Thrust Shaft, diameter at collars as per Rule 332
as fitted 472 as fitted 316 as fitted 332
 Main Shafts, diameter as per Rule Screw Shaft, diameter as per Rule 349 Is the main shaft fitted with a continuous liner Yps.
as fitted as fitted 362
 Liners, thickness in way of bushes as per Rule 18 Thickness between bushes as per rule 13.5 Is the after end of the liner made watertight in the
as fitted 19 as fitted 15.5 Yps.
 Propeller boss Yps. If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner Yps.
 Is 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 Yps.
 If two liners are fitted, is the shaft lapped or protected between the liners Yps. Is an approved Oil Gland or other appliance fitted at the after
 end of the tube shaft Yps. Length of Bearing in Stern Bush next to and supporting propeller 1420
 Propeller, dia. 4660 Pitch 3420 No. of blades 4 Material harc whether Moveable Yps. Total Developed Surface 6.34 sq. feet
 Method of reversing Engines Comp. air (Brown) Is a governor or other arrangement fitted to prevent racing of the engine when detached Yps. Means of lubrication
Yps. Thickness of cylinder liners 58.5/41 Are the cylinders fitted with safety valves Yps. Are the exhaust pipes and silencers water cooled or lagged with
 conducting material Yps. If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine to funnel
 Sling Water Pumps, No. 2 centrifugal Is the sea suction provided with an efficient strainer which can be cleared within the vessel Yps.
 Engine Pumps fitted to the Main Engines, No. 2 Diameter 160 Stroke 225 Can one be overhauled while the other is at work Yps.
 Pumps connected to the Main Bilge Line { No. and Size 1 duplex 140 x 150. 1 duplex 170 x 150. 1 duplex 300 x 300
 How driven Yps.
 Main Pumps, No. and size 1 duplex 300 x 300 Lubricating Oil Pumps, including Spare Pump, No. and size 2 @ 30 tons per hour
 Are two independent means arranged for circulating water through the Oil Cooler Yps. Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge
 Pumps, No. and size:—In Engine and Boiler Room 2 @ 90:5 @ 80: 1 @ 80 in tunnel well, 1 @ 80 in cofferdam, 1 @ 80 in tunnel
 Folds, &c. Forward 6 @ 80: dup Tank 2 @ 80: aft 6 @ 80
 Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 2 @ 90 to help pump. 1 @ 180 to ballast pump
 Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes Yps. Are the Bilge Suctions in the Machinery Space
 from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges Yps. except from isolated help.
 Are all Sea Connections fitted direct on the skin of the ship Yps. Are they fitted with Valves or Cocks valves
 Are they fixed sufficiently high on the ship's side to be seen without lifting the platform plates Yps. 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 Yps. Are the Blow Off Cocks fitted with a spigot and brass covering plate Yps.
 Do the pipes pass through the bunkers Yps. How are they protected Yps.
 Do the pipes pass through the deep tanks Yps. Have they been tested as per Rule Yps.
 Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times Yps.
 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 Yps. Is the Shaft Tunnel watertight see hull report Is it fitted with a watertight door Yps. worked from top platform
 On a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork Yps.
 Main Air Compressors, No. 1 No. of stages 3 Diameters 150: 675: 150 Stroke 610 Driven by Main crank shaft
 Auxiliary Air Compressors, No. 1 each Yps. engine No. of stages 3 Diameters 322: 288: 79 Stroke 220 Driven by 2 ex. Diesel engine
 II Auxiliary Air Compressors, No. 1 No. of stages 2 Diameters 80: 32 Stroke 140 Driven by hand
 Suctioning Air Pumps, No. Yps. Diameter Yps. Stroke Yps. Driven by Yps.

RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule Yps. Starting air receiver & Air. blast bottles
 Are the internal surfaces of the receivers be examined Yps. What means are provided for clearing their inner surfaces Stamps & tools
 Are there a drain arrangement fitted at the lowest part of each receiver Yps.
 Main Pressure Air Receivers, No. 3 Main. 3 Aux. Cubic capacity of each 2 @ 500 litres? 1 @ 250 Internal diameter 480 thickness 30
less, lap welded or riveted longitudinal joint. Seamless Material S Range of tensile strength 44-50.5 Working pressure by Rules 84.5
 Suctioning Air Receivers, No. 2 Total cubic capacity 30m³ Internal diameter 1953 thickness 26.5 Working pressure by Rules 25
less, lap welded or riveted longitudinal joint. riveted Material S Range of tensile strength 44-50.5 Working pressure by Rules 25

IS A DONKEY BOILER FITTED? *yes.*
HYDRAULIC TESTS:—

If so, is a report now forwarded? *yes.*

DESCRIPTION.	DATE OF TEST.	WORKING PRESSURE.	TEST PRESSURE.	STAMPED.	REMARKS.
ENGINE CYLINDERS	18/5/25 - 4/9/25	35 Kg/cm ²	60 Kg/cm ²	Gob NL	plain from times & tested 3 Kg/cm ² in water
" " COVERS	21/9/25 - 26/10/25	" " "	" " "	Gob NL	
" " JACKETS	22/10/25 - 26/10/25	1.5 " "	3 " "	Gob NL	
" " PISTON WATER PASSAGES	26/10/25 - 15/10/25	" " "	10 " "	Gob NL	water circulating passages tested to 3 Kg/cm ²
MAIN COMPRESSORS—1st STAGE	22/9/25 - 17/11/25	4.5 " "	10 " "	Gob NL	
" 2nd "	14/11/25 - 21/11/25	20 " "	40 " "	Gob NL	
" 3rd "	21/9/25 - 5/10/25	65 " "	130 " "	Gob NL	
AIR RECEIVERS—STARTING	24/11/25 - 28/11/25	25 " "	39 " "	NOS. TEST DATE. INITIALS.	
" INJECTION	25/9/24 - 25/5/25	65 " "	130 " "	Gob NL	
AIR PIPES	16/11/25 - 21/3/26	25+65 " "	50+130 " "	Gob NL	
FUEL PIPES	6/10/25 - 2/3/26	65 " "	130 " "	DATE TEST	
FUEL PUMPS	24/10/25	65 " "	130 " "	DATE TEST	
SILENCER	30/12/25		3.5 " "	NOS. 69+70 DATE. T.M.	
Exhaust WATER JACKET	12/9/25	1.5 " "	50 Kg/cm ²	NOS. 82+83 TEST DATE. VL.	
SEPARATE FUEL TANKS	2/12/25 & 3/12/25	depth of tank	15 1/2 "		

PLANS. Are approved plans forwarded herewith for Shafting (If not, state date of approval) *yes.*

Donkey Boilers *yes.*

General Pumping Arrangements *yes.*

Receivers *yes.*

Oil Fuel Burning Arrangements *yes.*

Separate Tanks *yes.*

SPARE GEAR

See attached List *yes.*

Stabilimento Tecnico Triestino
The foregoing is a correct description.
Fabbrica macchine S. Andrea - Trieste

Manufacturer.

Dates of Survey while building	{	During progress of work in shops--	{	See attached List ✓	
		During erection on board vessel--			
		Total No. of visits.			One hundred and sixty seven.
Dates of Examination of principal parts—Cylinders 18/5/25 } 26/10/25 } Covers 21/9/25 } 26/10/25 } Pistons 26/9/25 } 15/10/25 } Rods 19/10/25 } Connecting rods 19/10/25 }					
Crank shaft 16/6/25 Flywheel shaft 26/1/25 Thrust shaft 4/21 Intermediate shafts 8/1/24 26/4/25 Tube shaft "					
Screw shaft 11/11/25 Propeller 11/2/26 Stern tube 21/8/25 Engine seatings 29/12/25 Engines holding down bolts 26/2/26					
Completion of fitting sea connections 18/3/26 Completion of pumping arrangements 18/3/26 Engines tried under working conditions 11/3/26					
Crank shaft, Material SM. 1st steel Identification Mark 61.62.463 } 16/6/25-N63 } Flywheel shaft, Material SM. 1st steel Identification Mark 482-ASM-2					
Thrust shaft, Material " " " Identification Mark 5007-HK-4/21 Intermediate shafts, Material " " " Identification Mark 5889-HK-4/21 490/2-ASM }					
Tube shaft, Material " " " Identification Mark " " " Identification Mark 434/5 6/42 }					
Screw shaft, Material " " " Identification Mark 3-CNS-11/11 }					
Identification Mark 1-CNS-27/11 }					

Is the flash point of the oil to be used over 150° F. *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 and in accordance with the approved plans. The material and workmanship are good. On completion the machinery has been tried under working conditions with satisfactory results. With propeller immersed and main compression shut off 96 revolutions were obtained with free air from two auxiliary compressors. The machinery has been satisfactorily carried out in accordance with the Rules. Contra propeller fitted; the fixed parts welded on by electric process. The machinery of this vessel is eligible, in my opinion, to be classed in the Register Book with notation of + LMC 3.26.

The amount of Entry Fee	£12	605	When applied for,	12/4	1926
Special	£12	1247	When received,	28.5	26
Donkey Boiler Fee	£12	110			
Travelling Expenses (if any)	£12				

Committee's Minute

Assigned

FRI. 23 APR 1926
+ L.M.C. 3.26 CL.
Oil Engines

CERTIFICATE WRITTEN.

Geo. Munro & V. Lockney
Engineer Surveyor to Lloyd's Register of Shipping.
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