

# REPORT ON OIL ENGINE MACHINERY.

No. 2760

-9 NOV 1920

Report of writing Report 30<sup>th</sup> Oct 1920 when handed in at Local Office Dunkirk 19 Dunkirk Port of Dunkirk  
 Date, First Survey 18<sup>th</sup> Oct. 1920 Last Survey 27<sup>th</sup> Oct. 1920  
 No. in Survey held at Dunkirk Date, First Survey 18<sup>th</sup> Oct. 1920 Last Survey 27<sup>th</sup> Oct. 1920  
 on the Single Twin Triple Screw vessels M/V. "THEOPHILE GAUTIER"  
 Tons Gross 8705.7 Net 4688.43  
 Built at Dunkirk By whom built Chantiers de France Yard No. 132 When built 1926  
 Engines made at St. Denis (Seine) By whom made Cie. de Constructions Mecaniques Engine No. 25417-5422 Pmt When made 1925  
 Donkey Boilers made at Amman By whom made Cochran & Co Amman Ltd. Boiler No. 9441 When made 1924  
 Brake Horse Power 4500 Owners Servies Contractuels des Messageries Maritimes Port belonging to  
 Nom. Horse Power as per Rule 1164 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted Yes

**ENGINES, &c.**—Type of Engines Diesel 6 ST 60 2 or 4 stroke cycle 2 Single or double acting Single  
 Maximum pressure in cylinders 35 No. of cylinders 12 Diameter of cylinders 600 No. of cranks 8 Length of stroke 1066  
 Distance of bearings, adjacent to the Crank, measured from inner edge to inner edge  
 Revolutions per minute 110 Flywheel dia. ✓ Weight ✓ Means of ignition Air Compression Kind of fuel used Crude Oil  
 Crank Shaft, dia. of journals as per Rule ✓ Crank pin dia. ✓ Crank Webs Mid. length breadth ✓ Thickness parallel to axis ✓  
 as fitted ✓ Mid. length thickness ✓ Thickness around eye-hole ✓  
 Flywheel Shafts, diameter as per Rule ✓ Intermediate Shafts, diameter as per Rule 300 Thrust Shaft, diameter at collars as per Rule ✓  
 as fitted ✓ as fitted ✓ as fitted ✓

Tube Shafts, diameter as per Rule ✓ Screw Shaft, diameter as per Rule 344 Is the continuous shaft fitted with a continuous liner Continuous Liner  
 as fitted ✓ as fitted ✓ Is the screw shaft fitted with a continuous liner Continuous Liner  
 Bronze 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 18 + 17.5 as fitted 14 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  
 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 anti Corrosive paint  
 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 No Length of Bearing in Stern Bush next to and supporting propeller 1370  
 Propeller, dia. 4200 Pitch 4680 No. of blades 4 Material Bronze whether Moveable Yes Total Developed Surface 555 sq. ft.

Method of reversing Engines Direct Is a governor or other arrangement fitted to prevent racing of the engine when disclutched Yes Means of lubrication  
 Lubrication ✓ Thickness of cylinder liners ✓ Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled or lagged with  
 conducting material Ragged If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine In Tunnel  
 Bilge Water Pumps, No. 2 Centrifugal 250T Is the sea suction provided with an efficient strainer which can be cleared within the vessel Yes  
 Air Pumps fitted to the Main Engines, No. ✓ Diameter ✓ Stroke ✓ Can one be overhauled while the other is at work ✓  
1 1/2 x 190  
 Pumps connected to the Main Bilge Line { No. and Size 3. Drysdale Centrex patent 100 Tons Each  
 How driven Electric Motors

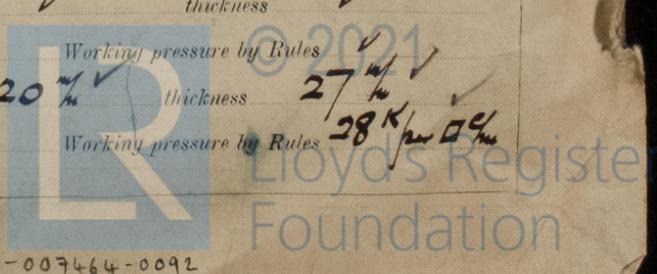
Fast Pumps, No. and size 2. Centrifugal 110 Tons Lubricating Oil Pumps, including Spare Pump, No. and size ✓  
 two independent means arranged for circulating water through the Oil Cooler ✓ Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge  
 Pumps, No. and size:—In Engine Room 4. of 90 Main Connection to pumps in E. Room = 125% D.  
 Holds, &c. 15. of 100, 3 of 60, 1 in Fore & after peaks, Two in hold 1, 2, 3, 4 Holds 2 in fore end of Tunnel, 2 in Main Room, 1 in Tunnel  
well of 100% one in each Cofferdam and in Refrig. room of 60%  
 Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 3. Drysdale pumps through change cock.  
 Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-bones Yes 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 Yes and as approved  
 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 platform plates Yes Are the Overboard Discharges above or below the deep water line above  
 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

Do all pipes pass through the bunkers ✓ How are they protected ✓  
 Do all pipes pass through the deep tanks No deep tank 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 Yes Is it fitted with a watertight door Yes worked from Engine Room, Tunnel & Bridge  
 On a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork ✓

Main Air Compressors, No. ✓ No. of stages ✓ Diameters ✓ Stroke ✓ Driven by ✓  
 Auxiliary Air Compressors, No. ✓ No. of stages ✓ Diameters ✓ Stroke ✓ Driven by ✓  
 All Auxiliary Air Compressors, No. ✓ No. of stages ✓ Diameters ✓ Stroke ✓ Driven by ✓  
 Suctioning Air Pumps, No. ✓ Diameter ✓ Stroke ✓ Driven by ✓  
 Auxiliary Engines crank shafts, diameter as per Rule ✓  
 as fitted ✓

**RECEIVERS:**—Is each receiver, which can be isolated, fitted with a safety valve Yes  
 Are the internal surfaces of the receivers be examined Yes What means are provided for cleaning their inner surfaces Scrub  
 Is there a drain arrangement fitted at the lowest part of each receiver Yes  
 High Pressure Air Receivers, No. ✓ Cubic capacity of each ✓ Internal diameter ✓ thickness ✓  
 Class, lap welded or riveted longitudinal joint ✓ Material ✓ Range of tensile strength ✓ Working pressure by Rules ✓  
 Suctioning Air Receivers, No. 2 Total cubic capacity 12 m<sup>3</sup> Internal diameter 1220 thickness 27  
 Class, lap welded or riveted longitudinal joint Riveted Material Steel plate Range of tensile strength ✓ Working pressure by Rules 28 K per sq. cm

THE SURVEYORS ARE REQUESTED NOT TO WRITE ACROSS THIS MARGIN.



IS A DONKEY BOILER FITTED? *Yes*

If so, is a report now forwarded? *Yes*

HYDRAULIC TESTS: *See Glasgow Rpt. 44095. On board after been fitted to 150 lbs per sq. in. 17.4.26*

DESCRIPTION.	DATE OF TEST.	WORKING PRESSURE.	TEST PRESSURE.	STAMPED.	REMARKS.
ENGINE CYLINDERS	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	
COVERS	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	
JACKETS	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	
PISTON WATER PASSAGES	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	
MAIN COMPRESSORS—1st STAGE	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	
2nd "	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	
3rd "	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	
AIR RECEIVERS—STARTING	<i>4.7.25</i>	<i>28 1/2 per sq. in.</i>	<i>42 1/2 per sq. in.</i>	<i>TC 4.7.25</i>	<i>Workmanship Good</i>
INJECTION	<i>14.4.26, 17.4.26</i>	<i>10 1/2, 28 1/2, 75 1/2</i>	<i>20 1/2, 56 1/2, 150 1/2</i>	<i>TC on flanges</i>	<i>Good.</i>
AIR PIPES	<i>✓</i>				
FUEL PIPES	<i>✓</i>				
FUEL PUMPS	<i>✓</i>				
SILENCER	<i>✓</i>				
WATER JACKET	<i>✓</i>			<i>TC</i>	<i>Good</i>
SEPARATE FUEL TANKS	<i>25.4.25, 27.4.25,</i>	<i>0</i>	<i>1.2 1/2</i>	<i>TC</i>	

PLANS. Are approved plans forwarded herewith for Shafting *H. 3.25* Receivers *13.11.24* Separate Tanks *17.10.24*  
 Donkey Boiler *Yes* General Pumping Arrangements *22.8.24* Oil Fuel Burning Arrangements *X*  
 SPARE GEAR *List of Spare Gear forwarded herewith, checked on board and found in order*

The foregoing is a correct description,

Manufacturer.

Dates of Examination of principal parts—Cylinders	<i>✓</i>	Covers	<i>✓</i>	Pistons	<i>✓</i>	Rods	<i>✓</i>	Connecting rods	<i>✓</i>
Crank shaft	<i>✓</i>	Flywheel shaft	<i>✓</i>	Thrust shaft	<i>✓</i>	Intermediate shafts	<i>✓</i>	Tube shaft	<i>✓</i>
Screw shaft	<i>✓</i>	Propeller	<i>✓</i>	Stern tube	<i>✓</i>	Engine seating	<i>✓</i>	Engines holding down bolts	<i>✓</i>
Completion of fitting sea connections	<i>23/6/26</i>	Completion of pumping arrangements	<i>19.7.26</i>	Engines tried under working conditions	<i>at sea 15/9</i>				
Crank shaft, Material	<i>✓</i>	Identification Mark	<i>✓</i>	Flywheel shaft, Material	<i>✓</i>	Identification Mark	<i>✓</i>		
Thrust shaft, Material	<i>✓</i>	Identification Mark	<i>✓</i>	Intermediate shafts, Material	<i>S.M. Ingot Steel</i>	Identification Marks	<i>TC 29/70, 30/1 and 28.7.</i>		
Tube shaft, Material	<i>✓</i>	Identification Mark	<i>✓</i>	Screw shaft, Material	<i>S.M. Ingot Steel</i>	Identification Mark	<i>TC 28/287, 288 and 23.7.</i>		
Is the flash point of the oil to be used over 150° F.	<i>Yes</i>								

General Remarks (State quality of workmanship, opinions as to class, &c.) *Please see Paris Rpt. 20 attached*  
*The main & auxiliary motors and auxiliaries of this vessel have been secured fitted on board, the workmanship is good, they have been tried under working conditions at sea and found in good order. The machinery is in good and safe working condition and eligible in my opinion to have the notations of + L.M.C. 10, 26; C.L.; OIL ENGINES; D.B. 100 lbs. H. Forging reports are forwarded herewith relating to Intermediate Screw shafts also to Dished Ends for Air receivers. The Safety valves of Air receivers have been adjusted to the working pressure of 28 1/2 per sq. in.*

The amount of Entry Fee ... *£ 952.-*  
 1/2 main motors ... *£ 4096.-*  
 1/2 Aux. motors ... *£ 2792.-*  
 Donkey Boiler Fee ... *£ 666.-*  
 Travelling Expenses (if any) ... *£*  
 Committee's Minute *TUES. 4 JAN 1927*  
 Assigned *+ L.M.C. 10.26 C.L.*  
 Oil Engines *CERTIFICATE WRITTEN*  
 Engineer Surveyor to Lloyd's Register of Shipping *John Righton*

