

REPORT ON OIL ENGINE MACHINERY.

No. 11757

Received at London Office

25 AUG 1945

Date of writing Report 2nd August 45 When handed in at Local Office 19 Port of Copenhagen
No. in Survey held at Copenhagen and Odense Date, First Survey 20 September 1935 Last Survey 4th July 1945
Reg. Book. Number of Visits 57
Single TANK CAROLINE MÆRSK.
on the Triple Screw vessel
Quadruple
Built at Odense By whom built Odense Maskarbejdsværkt 7/8 Yard No. 85 When built
Engines made at Copenhagen By whom made 7/8 Burmeister & Wain's Engine No. 3131 When made 1940
Donkey Boilers made at Copenhagen By whom made 7/8 Burmeister & Wain's Boiler No. 1970 When made 1940
Brake Horse Power 4620 Owners 7/8 Dampf- & Schiffs- & Maschinenbau "Sundborg" Port belonging to Fredericia
Nom. Horse Power as per Rule 653 Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted yes
Trade for which vessel is intended Carrying petroleum in bulk.

IL ENGINES, &c. — Type of Engines 2 or 4 stroke cycle 4 Single or double acting single.
Maximum pressure in cylinders 49 kg/cm² 29 1/8 740 7/8 Length of stroke 1500 7/8 59 1/4 No. of cylinders 8 No. of cranks 8
Mean Indicated Pressure 8.55 kg/cm² Diameter of cylinders 740 7/8 Length of stroke 1500 7/8 No. of cylinders 8 No. of cranks 8
Span of bearings, adjacent to the crank, measured from inner edge to inner edge 1006 7/8 Is there a bearing between each crank yes
Revolutions per minute 115 Flywheel dia. 4000 kg/4 2 BALANCE 2 14000 kg/4 2 Means of ignition Compression Kind of fuel used Heavy oil
Crank Shaft, Solid forged dia. of journals as per Rule 502 7/8 as fitted 525 7/8 Crank pin dia. 525 7/8 Crank webs Mid. length breadth 1000 7/8 Thickness parallel to axis 310 7/8
Semi-built as fitted 525 7/8 185 7/8 CENT. HOLE Mid. length thickness 300 7/8 Thickness around eye-hole 282.5 7/8
All built as per Rule 365 7/8 as fitted 370 7/8 Thrust Shaft, diameter at collars as fitted 383 7/8
Flywheel Shaft, diameter as fitted 402.4 7/8 as per Rule 408 7/8 Is the tube screw shaft fitted with a continuous liner yes
Tube Shaft, diameter as fitted 19.8 7/8 as per Rule 14.8 7/8
Bronze Liners, thickness in way of bushes as fitted 21.5 7/8 Thickness between bushes as fitted 16.0 7/8 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 yes 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 tube shaft No If so, state type Length of bearing in Stern Bush next to and supporting propeller 1900 7/8
Propeller, dia. 5330 7/8 Pitch 3571 7/8 No. of blades 4 Material Cast iron whether moveable No Total developed surface 10.66 sq. feet
Method of reversing Engines direct reversal a governor or other arrangement fitted to prevent racing of the engine when disengaged yes Means of lubrication forced Thickness of cylinder liners 53.5 7/8 Are the cylinders fitted with safety valves yes Are the exhaust pipes and silencers water cooled
Lagged with non-conducting material lagged If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine funnel Cooling Water Pumps, No. 1 1 1/2 165 7/8 Is the sea suction provided with an efficient strainer which can be cleared within the vessel yes
Bilge Pumps worked from the Main Engines, No. 1 Diameter 165 7/8 Stroke 230 7/8 Can one be overhauled while the other is at work
Pumps connected to the Main Bilge Line No. and size 1 1/2 165 7/8 (ballast) 1 1/2 30 7/8 (bilge) 1 1/2 23 7/8 (bilge) How driven steam steam main engine
Is the cooling water led to the bilges No If so, state what special arrangements are made to deal with this water in addition to the ordinary bilge pumping arrangements
Ballast Pumps, No. and size 1 1/2 30 7/8 Power Driven Lubricating Oil Pumps, including spare pump, No. and size 1 1/2 190 7/8 1 1/2 165 7/8
Are two independent means arranged for circulating water through the Oil Cooler yes Suctions, connected to both main bilge pumps and auxiliary
bilge pumps, No. and size:—In machinery spaces 5 1/2 3 1/2 1 1/2 3 1/2 hose connection 1 1/2 3 1/2 MAIN In pump room 1 1/2 6 1 1/2 8 1 1/2
In holds, &c. FORE HOLD: 2 1/2 3 1/2 FOW COFFERD: 1 1/2 4 1 1/2 4 1 1/2 6 1 1/2 6 1 1/2 3 1/2
Independent Power Pump Direct Suctions to the engine room bilges, No. and size 1 1/2 6 1 1/2 4 1 1/2
Are all the bilge suction pipes in holds and tunnel well fitted with strum-boxes yes Are the bilge suction in the machinery spaces 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 Valves except boiler blow off cocks 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
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 Is it fitted with a watertight door worked from
If 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. 2 No. of stages 2 diameters 3 1/2 7 1/2 stroke 2 1/2 11 7/8 driven by steam
Auxiliary Air Compressors, No. 2 No. of stages 2 diameters 3 1/2 7 1/2 stroke 7 driven by steam
Small Auxiliary Air Compressors, No. 2 No. of stages 2 diameters 3 1/2 7 1/2 stroke 7 driven by steam
What provision is made for first charging the air receivers The steam driven air compressors
SUPERCHARGING AIR BLOWERS
Scavenging Air Pumps, No. 2 diameter ROTARY stroke 2 1/2 11 7/8 driven by main engine
Auxiliary Engines crank shafts, diameter as per Rule 5 71.5 7/8 as fitted 75 7/8 64 70 No. 1 1/2 heavy oil 1 1/2 heavy oil 1 1/2 steam
Are the auxiliary engines been constructed under special survey yes Is a report sent herewith herewith

002536-002542-0215-1/2

PLANS. Are approved plans forwarded herewith for shafting yes ✓
 (If not, state date of approval) Receivers yes ✓ Separate fuel tanks yes ✓
 Donkey boilers yes ✓ General pumping arrangements yes ✓
 Oil fuel burning arrangements yes ✓ Pumping arrangements in machinery space yes ✓

The foregoing is a correct description,

AKKESLEKABET
BURMEISTER & WAIN'S MOSKIN OG SKIBSBYGGERI

Dates of examination of principal parts—Cylinders $30/1-6/2-40$ Covers $30/1-6/2-40$ Pistons $4/11-11/11-24/11-1939$ $4/11-11/11-14/11-39$ $4/11-11/11-18/11-39$
 Crank shaft $20/9-3/10-26/10-4/11-24/11-5/12-1939$ Flywheel shaft $22/11-5/12-1939$ Thrust shaft $23/2-4/2$ Rods $2/2-40$ Connecting rods $4/2-40$
 $20/1-40$ $4/1-13/1-6/1$

Rank shaft, material *S. M. Steel* Identification mark *22090's no 5103-5104* Engines tried under working conditions *47-48.*
 Thrust shaft, material *S. M. Steel* Identification mark *22090's no 5153* Flywheel shaft, material _____ Identification mark _____
 Intermediate shafts, material *S. M. Steel* Identification mark *22090's no 525*

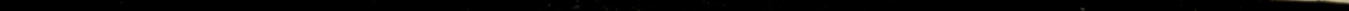
the vessel (not being an oil tanker) fitted for carrying oil as cargo. yes If so, have the requirements of the Rules been complied with yes.

Under special survey in accordance with the Rules the approved plans and the Secretary's letter E dated 23/1/1928, 28/1/1928, 3/11/23/1/1928.

and satisfactory. Working conditions and the maneuvering tested and

commend the vessel's machinery to have isolation of ~~DEL~~ LMC - with a date to be
ed by the Committee, London. OIL ENGINES - CI - 300 180 11

Donkey Boiler Fee... 658.80.
ing " " 350.00
Travelling Expenses (if any) 516.15.
When received 19
C. H. Clausen
Engineer Surveyor to Lloyd's Register of Shipping.




Port of *Copenhagen* Continuation of Report No. *11757* dated *2nd August 1945* on the

AUXILIARY MACHINERY

~~Danske~~ Staalskibsværft A/s

E. J. Ingster

© 2020



Lloyd's Register

002512-0215 2 1/2

5m,6,38,7 (MADE IN ENGLAND.

002536-002542-0215 ²/₂