

REPORT ON OIL ENGINE MACHINERY.

No 107110

30 MAR 1950

Received at London Office

Date of writing Report 3/3/50 When handed in at Local Office 29 MAR 1950 Port of NEWCASTLE-ON-TYNE

No. in Survey held at BLYTH Date, First Survey 1st FEBRUARY, 1949 Last Survey 21st FEBRUARY, 1950

Reg. Book. on the Single Screw vessel NELLY MAERSK (YARD N° 342) Tons Gross 8223.08 Net 4805.36

Built at BLYTH By whom built BLYTH D.D. & S.B. CO. LTD Yard No. 342 When built 1950

Engines made at TURIN By whom made SOC. AN. FIAT STAB. GRANDI MOTORI Engine No. 2973 When made 1942

Donkey Boilers made at WALLSEND & STOCKTON By whom made NE. MARINE ENG. CO (1938) LTD Boiler No. 3172 When made 1949

Brake Horse Power 5100 Owners MESSRS A.P. MØLLER Port belonging to Fredericia

Nom. Horse Power as per Rule 1328 Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted

Trade for which vessel is intended Carrying Petroleum in bulk.

OIL ENGINES, &c.—Type of Engines

2 or 4 stroke cycle Single or double acting

Maximum pressure in cylinders
 Mean Indicated Pressure
 Span of bearings, adjacent to the Crank, measured from inner edge to inner edge
 Revolutions per minute
 Crank Shaft, { Solid forged, Semi built, All built }
 Flywheel Shaft, diameter
 Tube Shaft, diameter
 Bronze Liners, thickness in way of bushes
 propeller boss
 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
 shaft

SEE GENOA RPT. NO 17369

Propeller, dia. 5000 mm. Pitch 3815 mm / 3020 mm. No. of blades 4 Material BRONZE whether Moveable * FIXED Total Developed Surface 96.23 sq. feet

Method of reversing Engines
 Thickness of cylinder liners
 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

Cooling Water Pumps, No.
 Bilge Pumps worked from the Main Engines, No.
 Pumps connected to the Main Bilge Line

Is the cooling water led to the bilges NO
 Ballast Pumps, No. and size 1-150 TONS/HR
 Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size 1-60 TONS/HR 1-150 TONS/HR

Are two independent means arranged for circulating water through the Oil Cooler YES
 Pumps, No. and size:—In Machinery Spaces 2-5" DIA. 3-3" DIA. 2-2 1/2" DIA.

In Holds, &c.
 Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size 2-5" DIA.

Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes YES
 Are all Sea Connections fitted direct on the skin of the ship YES

Are they fixed sufficiently high on the ship's side to be seen without lifting the platform plates YES
 Are they each fitted with a Discharge Valve always accessible on the plating of the vessel YES

What pipes pass through the bunkers
 What pipes pass through the deep tanks

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

Is 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
 Auxiliary Air Compressors, No. 2
 Small Auxiliary Air Compressors, No.

Is provision made for first Charging the Air Receivers
 scavenging Air Pumps, No. SEE GENOA RPT. NO 17369

Auxiliary Engines crank shafts, diameter
 Have the Auxiliary Engines been constructed under special survey YES

Is a report sent herewith COPENHAGEN PPT. RETURNED



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AIR RECEIVERS: - Have they been made under survey SEE RPT. N° 17369 State No. of Report or Certificate
 Is each receiver, which can be isolated, fitted with a safety valve as per Rule YES
 Can the internal surfaces of the receivers be examined and cleaned YES Is a drain fitted at the lowest part of each receiver YES
Injection Air Receivers, No. ✓ Cubic capacity of each ✓ Internal diameter ✓ thickness ✓
 Seamless, lap welded or riveted longitudinal joint ✓ Material ✓ Range of tensile strength ✓ Working pressure by Rules ✓ Actual ✓
Starting Air Receivers, No. SEE RPT. N° 17369 Total cubic capacity Internal diameter thickness
 Seamless, lap welded or riveted longitudinal joint Material Range of tensile strength Working pressure by Rules Actual

IS A DONKEY BOILER FITTED? YES If so, is a report now forwarded? YES
 Is the donkey boiler intended to be used for domestic purposes only NO

PLANS. Are approved plans forwarded herewith for Shafting SEE RPT. N° 17369 Receivers SEE RPT. N° 17369 Separate Fuel Tanks YES
 (If not, state date of approval)
 Donkey Boilers YES General Pumping Arrangements yes Pumping Arrangements in Machinery Space YES
 Oil Fuel Burning Arrangements YES

SPARE GEAR.
 Has the spare gear required by the Rules been supplied YES ✓
 State the principal additional spare gear supplied MAIN ENGINE
1-CYLINDER LINER COMPLETE, 1- PISTON WITH RINGS, 72- PISTON RINGS, 2- COMPLETE FUEL PUMPS (TOP & BOTTOM CYLINDERS), 2- TOP FUEL VALVES, 2- BOTTOM FUEL VALVES.

The foregoing is a correct description. (AS FAR AS APPLICABLE)
 Manufacturer.

[Signature]
 GENERAL MANAGER

Dates of Survey while building
 During progress of work in shops: 1949 FEB. 1, 17, 25, MAY 10, JUNE 24, JULY 11, SEPT. 5, 9, 12, 13, 14, 20, 26, OCT. 10, 11, 12, 13, 17, 19, 25, NOV. 11, DEC. 9, 12, 30, 1950 JAN. 4, 5, 10, 12, 25
 During erection on board vessel: FEB. 4, 7, 17, 18, 21
 Total No. of visits 36

Dates of Examination of principal parts - Cylinders SEE RPT. N° 17369 Pistons Rods Connecting rods
 Crank shaft Flywheel shaft Thrust shaft Intermediate shafts Tube shaft
 Screw shaft SEE RPT. N° 17369 Propeller 14/9/49 Stern tube 20/9/49 Engine seatings 14/9/49 Engines holding down bolts 5/1/50
 Completion of fitting sea connections 20/9/49 Completion of pumping arrangements 4/2/50 Engines tried under working conditions 18/2/50
 Crank shaft, Material Identification Mark Flywheel shaft, Material Identification Mark
 Thrust shaft, Material Identification Mark Intermediate shafts, Material Identification Marks
 Tube shaft, Material Identification Mark Screw shaft, Material Identification Mark

Identification Marks on Air Receivers
T.V.Cs approved Sec. 8/3/50 for 115 R.P.M. Provided NOT 60 to 80 R.P.M.

Is the flash point of the oil to be used over 150° F. YES
 Have the requirements of the Rules for oil fuel pipes and tank fittings been complied with YES
 Description of fire extinguishing apparatus fitted STEAM SMOTHERING & ELLERHAMMER FOAM
 Is the vessel (not being an oil tanker) fitted for carrying oil as cargo OIL TANKER If so, have the requirements of the Rules been complied with ✓
 If the notation for Ice Strengthening is desired, state whether the requirements in this respect have been complied with not required
 Is this machinery duplicate of a previous case SEE RPT. N° 17369 If so, state name of vessel

General Remarks (State quality of workmanship, opinions as to class, &c.)
The foregoing machinery has been fitted to the "helly maerk" (Blyth Jwd n° 342) & subsequently tried under working conditions on a sea trial & found satisfactory. Torsiongraph records have been taken from the main engine shafting system by the Society's Research staff. The damaged main engine bedplate casting has been repaired in accordance with London Office requirements. The machinery of this vessel, in my opinion to have the notation LMC 2.50, O.B.S. 2.50 & Screw shaft (C.L.) even 9.49, subject to torsiongraph records taken on the vessel's sea trial being approved by the Committee of the repairs to the main engine bedplate being specially examined not later than the end of February 1951. (See above)

The amount of Entry Fee .. £ 102 : 12 : When applied for,
 Special £ : : 19
 Donkey Boiler Fee £ : : When received,
 Travelling Expenses (if any) £ 1 : 19 : 19

[Signature]
 Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI. 21 APR 1950

Assigned LMC 2.50 Oil Eng Subject (with endorsement)
C.L. 27B 18016



NEWCASTLE-OR-TYNE
 Certificate (if required) to be sent to
 (The Surveyors are requested not to write on or before the space for Committee's Minute.)

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