

REPORT ON OIL ENGINE MACHINERY.

No. 21282 -
6 - FEB 1956

Received at London Office

Writing Report 4-2-56 When handed in at Local Office 4-2-56 Port of Genoa

Survey held at Turin Date, First Survey 30-7-54 Last Survey 3-1-56
Number of Visits 25

Single on the Twin Triple Quadruple Screw vessel Cantiere Navale Giuliano San Giusto- Yard No. 45- Tons {Gross - Net -}

Trieste By whom built Cantiere Navale Giuliano-S. Giusto Yard No. 45 When built -

Turin By whom made S.A. "FIAT" S.G.M. Engine No. 4025 When made 1955

Boilers made at - By whom made - Boiler No. - When made -

Horse Power {Maximum 2000 Service 1800} Owners Messrs. GESTIONI ESERCIZIO NAVI SICILIA GENS Port belonging to -

Is Refrigerating Machinery fitted for cargo purposes - Is Electric Light fitted -

Type of Engines "FIAT" Airless Injection- A 486 T or 4 stroke cycle 2 Single or double acting (2) SA

60 kg/cm² Diameter of cylinders 480 m/m Length of stroke 640mm. No. of cylinders 6 No. of cranks 6

Indicated Pressure 6,11 kg/cm² Span of bearings (i.e., distance between inner edges of bearings in a crank) 590 m/m

Is there a bearing between each crank. yes Revolutions per minute {Maximum 260 Service 250 compression} Kind of fuel used Diesel

Weight 760 kg Moment of inertia of flywheel ~~1316~~ Kg/m² 1316 Means of ignition Diesel

as approved 350 m/m Crank pin dia. 350 m/m Crank webs Mid. length breadth 520 Thickness parallel to axis -

as approved 195 m/m Thrust Shaft, diameter at collars as per Rule as approved 350 m/m

Screw Shaft, diameter as per Rule as approved 203mm at coupling screw shaft fitted with a continuous liner {yes}

as approved 220mm at top of cone as per Rule as approved -

15 m/m Thickness between bushes as fitted 13 m/m Is the after end of the liner made watertight in the

yes If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner -

Is an approved Oil Gland fitted at the after of stern tube - If so, state type - Length of bearing in Stern Bush next to and supporting propeller 880 m/m

2500 Pitch 1920mm No. of blades four Material M.B. whether moveable - Total developed surface 2.46 sq. mt

1518 Kind of damper, if fitted -

direct Is a governor or other arrangement fitted to prevent racing of the engine governor Means of

forced thickness of cylinder liners 43 m/m Are the cylinders fitted with safety valves. yes Are the exhaust pipes and silencers water cooled

lagged If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned

Cooling Water Pumps, No. and how driven - Working F.W. -

Spare F.W. - S.W. - Is the sea suction provided with an efficient strainer which can be cleared within the vessel -

Pumps worked from the Main Engines, No. and capacity - Can one be overhauled while the other is at work -

No. and capacity of each - How driven -

If so, state what special arrangements are made to deal with this water in addition to the ordinary bilge pumping

Power Driven Lubricating Oil Pumps, including spare pump, No. and size -

two independent means arranged for circulating water through the Oil Cooler - Branch Bilge Suctions -

In machinery spaces - In pump room -

Are the bilge suction pipes in holds and tunnel well fitted with strum-boxes - Are the bilge suction in the machinery spaces led from easily

Are they fitted with valves or cocks - Are they fixed

Are the overboard discharges above or below the deep water line -

Are the blow off cocks fitted with a spigot and brass covering plate -

How are they protected -

Have they been tested as per Rule -

all pipes, cocks, valves and pumps in connection with the machinery and all boiler mountings accessible at all times -

Is the shaft tunnel watertight - Is it fitted with a watertight door - worked from -

Are they provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork -

No. of stages - diameters - stroke - driven by -

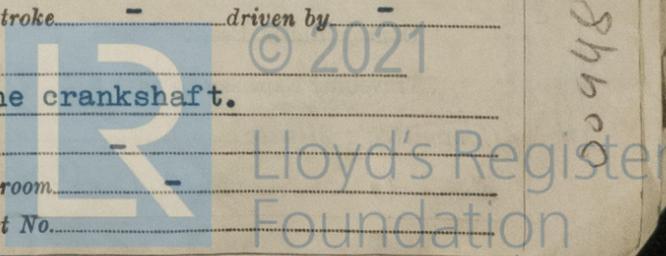
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How driven BY Main engine crankshaft.

Engine Nos. - Position of each in engine room - Report No. -

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AIR RECEIVERS:—Have they been made under survey yes Stats No. of report or certificate Genoa no. A.
 State full details of safety devices normal spring loaded safety valves. (copy attached 4c.)
 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, welded or riveted longitudinal joint - Material - Range of tensile strength - Working pressure -
 Starting Air Receivers, No. two Total cubic capacity 5000 ltrs. Internal diameter 700 m/m. thickness 12m/m.
 Seamless, welded or riveted longitudinal joint seamless Material S.M. Steel Range of tensile strength ≥ 55 Working pressure 30 K

IS A DONKEY BOILER FITTED - If so, is a report now forwarded -
 Is the donkey boiler intended to be used for domestic purposes only 14-3-1955

PLANS. Are approved plans forwarded herewith for shafting 27-6-1955 17-5-1955 Receivers 24 - 4 - '47 Separate fuel tanks -
 (If not, state date of approval)
 Donkey boilers - General pumping arrangements - Pumping arrangements in machinery space -
 Oil fuel burning arrangements -

Have Torsional Vibration characteristics been approved yes Date and particulars of approval Secretary Eng. letter of 9/11/1955.

Has the spare gear required by the Rules been supplied To be supplied at Trieste. State if for "short voyages" only BSR 60/80 with large propeller 16/76 " C.8 propeller

State the principal additional spare gear supplied -

FIAT
 STABILIMENTO GRANDI MOTORI

The foregoing is a correct description,
[Signature]

Manufacturer.

Dates of Survey while building: During progress of work in shops - - 30-7-1954 to 3-1-1956 = 25.
 During erection on board vessel - - -
 Total No. of visits 25 -

Dates of examination of principal parts—Cylinders 20/7/55/ 30-8-55/ Covers 3-1-56. Pistons 2-8-55/ 16-9-55/ Rods 3-1-56 Connecting rods 7-10-
26-8-55/ Crank shaft 3-1-56. Flywheel shaft as thrust. Thrust shaft 3-1-56/ Intermediate shafts - Tube shaft 3-1-

Screw shaft - Propeller - Stern tube - Engine seatings - Engine holding down bolts -

Completion of fitting sea connections - Completion of pumping arrangements - Engines tried under working conditions -

Crank shaft, material S.M. Steel Identification mark Lloyds-HNO-10 KM- Flywheel shaft, material S.M. Steel Identification mark as thru
26-8-55-KM. Lloyd's Gen. 2244

Thrust shaft, material S.M. Steel Identification mark 20.9.55-SF. Intermediate shafts, material - Identification marks -

Tube shaft, material - Identification mark - Screw shaft, material - Identification mark -

Identification marks on air receivers No. 2-307609 = 2-307610 = Lloyd's Test -60 Kgs.cm² -W.P. 30 Kgs.cm²
D.L. 7.10.1955

Welded receivers, state Makers' Name Messrs. DALMINE -S;p.A. =Dalmine. -

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 -

Full description of fire extinguishing apparatus fitted in machinery spaces -

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

What is the special notation desired -

If the notation for ice strengthening is desired, state whether the requirements in this respect have been complied with -

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, Speed restrictions, &c.) The machinery of this vessel has constructed under special survey of tested materials and in accordance with the approved plans, Secretary's letter and Rules Requirements. The materials and workmanship are good. This oil engine has been tried under working condition on bench at full power and found satisfactory. The torsional vibration characteristics of the complete propelling system have been approved for a service speed of 235 or 260 RPM. provided a notice board be fitted at the control station stating that the engine is not to be operated continuously between 60 and 80 RPM and the engine tachimeter to be marked accordingly. The engine has now been despatched to Trieste to be fitted on board the vessel and tried at full power to the satisfaction of the Trieste's Surveyors, the vessel will be eligible to be classed in the Society's Register Book with the notation +LMC (with date)- CLANS

NOTE: This engine is fitted with crankcase explosion relief devices.

The amount of Entry Fee ... £ 306000
 Special CAN FANG ... £ 5420 When applied for 10/11 1956
 Donkey Boiler Fee ... £ When received 19
 Travelling Expenses (if any) £ 58780

[Signature]
 (S. Folle)
 Engineer Surveyor to Lloyd's Register of Shipping



Committee's Minute FRIDAY 23 NOV 1956
 Assigned See Rpt 1 (COPY OF THIS REPORT SENT TO TRIESTE)

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