

Rpt. 4b

REPORT ON OIL ENGINE MACHINERY.

Date of writing Report 8 Aug. 1930 When handed in at Local Office

Port of Sdm.

Received at London Office

13 AUG 1930

No. in Reg. Book.

Survey held at

Nickla Sdm. Dist.

Date, First Survey

24 March

Last Survey

31 July 1930

Number of Visits

on the

Single
Twin
Triple
Quadruple

MOTOR
Screw vessel

"THORSHAVN"

Tons

Gross

6749

Net

4045

Built at

Sunderland

By whom built

Mr James Lamb & Sons Ltd

Yard No. 710

When built 1930

Engines made at

Stockholm

By whom made

Mkbel. Mas Diesel

Engine No. 80335

When made 1930

Donkey Boilers made at

By whom made

Boiler No.

When made

Brake Horse Power

100

Owners

Messrs. William Delford & Sons Ltd

Port belonging to

Sunderland

Nom. Horse Power as per Rule

46

Is Refrigerating Machinery fitted for cargo purposes

No

Is Electric Light fitted

Yes

Trade for which vessel is intended

Oil Tanker

IL ENGINES, &c.

Type of Engines

Stationary Diesel Oil Engine (Type 2A29) 2 stroke cycle

Single or double acting

Maximum pressure in cylinders

35 kg/cm²

Diameter of cylinders

290 mm

Length of stroke

410 mm

No. of cylinders

2

No. of cranks

2

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge

984 mm

Is there a bearing between each crank

No

Revolutions per minute

275

Flywheel dia.

1400 mm

Weight

1185 kg

Means of ignition

compression

Kind of fuel used

crude oil

Crank Shaft, dia. of journals

as per Rule 178 mm

Crank pin dia.

195 mm

Crank Webs

Mid. length breadth 260 mm

Thickness parallel to axis

1

Flywheel Shaft, diameter

as fitted

Intermediate Shafts, diameter

as per Rule

Thrust Shaft, diameter at collars

as fitted

Tube Shaft, diameter

as per Rule

Screw Shaft, diameter

as fitted

Is the tube shaft fitted with a continuous liner

Bronze Liners, thickness in way of bushes

as per Rule

Thickness between bushes

as fitted

Is the after end of the liner made watertight in the

propeller boss

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

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

Is an approved Oil Gland or other appliance fitted at the after

end of the tube shaft

Length of Bearing in Stern Bush next to and supporting propeller

Propeller, dia.

Pitch

No. of blades

Material

whether Moveable

Total Developed Surface

sq. feet

Method of reversing Engines

Is a governor or other arrangement fitted to prevent racing of the engine when declutched

Yes

Means of lubrication

Thump

Thickness of cylinder liners

none fitted

Are the cylinders fitted with safety valves

Yes

Are the exhaust pipes and silencers water cooled or lagged with

non-conducting material

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.

1

Is the sea suction provided with an efficient strainer which can be cleared within the vessel

Bilge Pumps worked from the Main Engines, No.

Diameter

Stroke

Can one be overhauled while the other is at work

Pumps connected to the Main Bilge Line

No. and Size

How driven

Ballast Pumps, No. and size

Lubricating Oil Pumps, including Spare Pump, No. and size

Are 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 Machinery Spaces

In Holds, &c.

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size

Are the Bilge Suctions in the Machinery Spaces

Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes

Are the Bilge Suctions in the Machinery Spaces

ed from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges

Are all Sea Connections fitted direct on the skin of the ship

Are they fitted with Valves or Cocks

Are they fixed sufficiently high on the ship's side to be seen without lifting the platform plates

Are the Overboard Discharges above or below the deep water line

Are they each fitted with a Discharge Valve always accessible on the plating of the vessel

Are the Blow Off Cocks fitted with a spigot and brass covering plate

What pipes pass through the bunkers

How are they protected

What pipes pass through the deep tanks

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

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

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. fitted

No. of stages

Diameters

Stroke

Driven by

Auxiliary Air Compressors, No.

No. of stages

Diameters

Stroke

Driven by

Small Auxiliary Air Compressors, No.

No. of stages

Diameters

Stroke

Driven by

Scavenging Air Pumps, No.

Diameter

Stroke

Driven by

Auxiliary Engines crank shafts, diameter

as per Rule

as fitted

IR RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule

Can the internal surfaces of the receivers be examined

What means are provided for cleaning their inner surfaces

Is there a drain arrangement fitted at the lowest part of each receiver

High Pressure Air Receivers, No. fitted

Cubic capacity of each

Internal diameter

thickness

Seamless, lap welded or riveted longitudinal joint

Material

Range of tensile strength

Working pressure by Rules

Starting Air Receivers, No. ordered

Total cubic capacity

Internal diameter

thickness

Seamless, lap welded or riveted longitudinal joint

Material

Range of tensile strength

Working pressure by Rules

002138-002150-0014

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Lloyd's Register

Foundation

IS A DONKEY BOILER FITTED?

PLANS. Are approved plans forwarded herewith for Shafting *E 28.5.25*
(If not, state date of approval)

If so, is a report now forwarded?

Receivers *25.10.26*

Separate Tanks

Donkey Boilers

General Pumping Arrangements

Oil Fuel Burning Arrangements

SPARE GEAR *as per list, approved on the 4th Febr. 1926, will be inspected when machinery is being fitted in ship.*

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building
During progress of work in shops - *24 14 2, 17, 22 & 31 / 7 - 30*
During erection on board vessel -
Total No. of visits *in shop 6*

Dates of Examination of principal parts—Cylinders *with* Covers *17 & 22 / 7 30* Pistons *22 / 7 30* Rods Connecting rods *24 2 & 22 / 3 7 30*

Crank shaft *4, 7 30* Flywheel shaft Thrust shaft Intermediate shafts Tube shaft

Screw shaft Propeller Stern tube Engine seatings Engines holding down bolts

Completion of fitting sea connections Completion of pumping arrangements Engines tried under working conditions *in shop 17 30*

Crank shaft, Material *S. M. Steel* Identification Mark *LLOYD'S NO 5890 A.I. 22.7.30 A* 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

Is the flash point of the oil to be used over 150° F.

Is this machinery duplicate of a previous case *Yes* If so, state name of vessel *see Gen. report no. 3272.*

General Remarks (State quality of workmanship, opinions as to class, &c.)

I am of opinion that this engine is of superior material and workmanship, and as it has been designed and constructed under Special Survey, I have respectfully to submit that it be approved as auxiliary to a classed main engine.

This engine has been satisfactorily fitted in the vessel & tried under full working conditions with good results.

The amount of Entry Fee ... £ : : When applied for,
Special Survey in ship. *Kr. 218: 40* : : *8. 8. 1930*
Donkey Boiler Fee ... £ : : When received,
Travelling Expenses (if any) *£ 28: 00* : : *30. 9. 1930*
Total Kr. 246: 40

Committee's Minute

TUE. 25 NOV 1930

Assigned

See Std. J.E. 30504

H. J. Andersson
Acting Engineer Surveyor to Lloyd's Register of Shipping.



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Rpt. 4b

Date of writing Report

No. in Survey held
Reg. Book

on the

Built at *Funchal*

Engines made at

Donkey Boilers made

Brake Horse Power

Nom. Horse Power

Trade for which ves.

OIL ENGINES,

Maximum pressure in cyl

Span of bearings, adjacent

Revolutions per minute

Crank Shaft, dia. of jo

Flywheel Shaft, dia

Tube Shaft, diameter

Bronze Liners, thickness

propeller boss

If the liner does not fit tig

If two liners are fitted, i

end of the tube shaft

Propeller, dia.

Method of reversing

pumps Thickness

non-conducting material

Cooling Water Pumps

Bilge Pumps worked fr

Pumps connected to the M

Ballast Pumps, No. an

Are two independent mean

Pumps, No. and size:—In

In Holds, &c.

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Auxiliary Air Compres

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Scavenging Air Pump

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AIR RECEIVER

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