

Rpt. 4b.

## REPORT ON OIL ENGINE MACHINERY.

No 97822

Received at London Office

8 SEP 1939

NEWCASTLE-ON-TYNE

Date of writing Report

19

When handed in at Local Office

4/9/39 Port of

No. in Survey held at  
Reg. Book.

Newcastle on Tyne

Date, First Survey

30/12/38

Last Survey

30/8/1939.

Number of Visits

86

25751

Single  
Triple  
Quadruple

Screw vessel

"HAV"

Tons  
Gross  
Net

Built at

Newcastle on Tyne

By whom built

Swan Hunter &amp; Wigham Richardson Ltd

Yard No. 1567

When built 1939-8

Engines made at

do

By whom made

do

Engine No. 1606

When made

"

Donkey Boilers made at

do

By whom made

do

Boilers No. 1606

When made

"

Brake Horse Power

2800

Owners

Port belonging to

OSLO

Nom. Horse Power as per Rule

687

Is Refrigerating Machinery fitted for cargo purposes

No

Is Electric Light fitted

Yes

Trade for which vessel is intended

Ocean going

23 5/8

91 5/8

L ENGINES, &amp;c.

Type of Engines

Airless Injection Opposed Piston type 2 or 4 stroke cycle 2

Single or double acting

Single

Maximum pressure in cylinders

680 lb

Diameter of cylinders

600 m.m.

Length of stroke

2320 m.m.

No. of cylinders

4

No. of cranks

4 three-throw

Mean Indicated Pressure

84-85 lb

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

from Centres of Side crank pins 1200 m.m.

for 2450 m.m.

Is there a bearing between each crank

Yes

bet each three-throw

Revolutions per minute

95

Flywheel dia

2050

Weight

2.2 tons

Means of ignition

Compression

Kind of fuel used

Heavy oil

Crank Shaft, dia. of journals

as per Rule 439

as fitted 450

Crank pin dia.

450 with 447

Mid. length breadth

820

Thickness parallel to axis

255 m.m.

Flywheel Shaft, diameter

as per Rule 13.32

as fitted 13 3/4

Intermediate Shafts, diameter

as per Rule 13.32

as fitted 13 3/4

Thrust Shaft, diameter at collars

as per Rule 13.32

as fitted 13 3/4

Screw Shaft, diameter

as per Rule 14.695

as fitted 14 1/4

Is the shaft fitted with a continuous liner

Yes

Bronze Liners, thickness in way of bushes

as per Rule 25/32

as fitted 25/32

Thickness between bushes

as per Rule 23/32

as fitted 23/32

Is the after end of the liner made watertight in the

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

In one piece

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

Light fit

If two liners are fitted, is the shaft lapped or protected between the liners

Yes

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

If so, state type

Yes

Length of Bearing in Stern Bush next to and supporting propeller

61 1/2

Propeller, dia.

16-6

Pitch

13-6

No. of blades

4

Material

M. Bz

whether Moveable

No

Method of reversing Engines

Hand lever

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

Yes

Means of lubrication

Thickness of cylinder liners

25 m.m.

Are the cylinders fitted with safety valves

Yes

Are the exhaust pipes and silencers water cooled or lagged with

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

Led up funnel

Cooling Water Pumps, No.

2 for Distilled Water for M. Eng.

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

No

Water for M. Eng.

Bilge Pumps worked from the Main Engines, No.

None

Diameter

Stroke

Can one be overhauled while the other is at work

Pumps connected to the Main Bilge Line

No. and Size

Three viz 1 G. SP 10 1/2 x 9 x 18

How driven

2-Ball and Stand by SW Cooling 10 1/2 x 12 1/2 x 21

each 190 tons/hr

If 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

Main Pumps, No. and size

2 9 10 1/2 x 12 1/2 x 21

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

2 7 7 1/2 x 8 x 18

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

3 9 3 (2 on port &amp; 1 on S.)

1 of 2 on port

Funnel recess 1 of 3

In Pump Room

In Holds, &amp;c.

2 1 Hold-2 9 3; 2 2 Hold-2 9 3 1/2; 2 3 Hold (D.T. for) 2 9 2 1/2; 2 4 Hold-2 9 3; 2 5 Hold-2 9 3

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

2 9 5 (1 on port &amp; 1 on Sth.)

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

Yes

Are the Bilge Suctions 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

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

Both

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

What pipes pass through the bunkers

None

How are they protected

Yes

What pipes pass through the deep tanks

Bilge suction to nos 1 &amp; 2 Holds

Have they been tested as per Rule

Yes

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

Is the Shaft Tunnel watertight

Yes

Is it fitted with a watertight door

Yes

worked from

upper deck level

If a wood vessel, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork

Yes

Main Air Compressors, No.

None

No. of stages

Diameters

Stroke

Driven by

Auxiliary Air Compressors, No.

2

No. of stages

3

Diameters

Stroke

Driven by

Steam (direct.)

Small Auxiliary Air Compressors, No.

None

No. of stages

Diameters

Stroke

Driven by

Scavenging Air Pumps, No.

One

Diameter

1960 m.m.

Stroke

610 m.m.

Driven by

Main engine

Auxiliary Engines crank shafts, diameter

as per Rule

as fitted

No.

Three viz 2 Steam 22 1/2 Kw; 1 Oil eng 7 Kw Dynamos

Position

all on Sth side in E.R.

Stern

Foundation

W174-0063



