

REPORT ON OIL ENGINE MACHINERY.

No. 10148

Date of writing Report 14 March 1926 When handed in at Local Office

Received at London Office 26 MAR 1926

No. in Survey held at Reg. Book.

Amsterdam

Port of

Amsterdam

Date, First Survey 10 February

Last Survey 2 March 1926

Number of Visits 7

Single
on the Twin
Triple Screw vessels

Oil Engines Nos. 3605/6

Tons

Gross

Net

Built at

Amsterdam

By whom built

J. V. Kromhout M.T. Yard No.

When built

1914

Engines made at

By whom made

Engine No. 3605/6 When made

Donkey Boilers made at

By whom made

Boiler No. When made

Brake Horse Power 80 B.H.P.

Owners Ned. Ind. Tankstoomvaart Mij.

Port belonging to

Amsterdam

Nom. Horse Power as per Rule 2.3

Is Refrigerating Machinery fitted for cargo purposes

Is Electric Light fitted

OIL ENGINES, &c.—Type of Engines

Kromhout Heavy Oil Engines

2 or 4 stroke cycle

Single or double acting

Maximum pressure in cylinders

16 atm

No. of cylinders 2

Diameter of cylinders

300 mm

No. of cranks 2

Length of stroke 310 mm

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

320 mm

Is there a bearing between each crank

Yes

Revolutions per minute 350

Flywheel dia. 1000 mm

Weight 820 kg

Means of ignition

hot plate

Kind of fuel used

Crude oil

Crank Shaft, dia. of journals

as per Rule 105 mm

as fitted 105 mm

Crank pin dia. 105 mm

Crank Webs

Mid. length breadth 140 mm

Mid. length thickness 65 mm

Thickness parallel to axis 65 mm

Thickness around eye hole 65 mm

Flywheel Shafts, diameter

as per Rule 104 mm

as fitted 104 mm

Intermediate Shafts, diameter

as per Rule

as fitted

Thrust Shaft, diameter at collars

as per Rule 40 mm

as fitted 40 mm

Tube Shafts, diameter

as per Rule

as fitted

Screw Shaft, diameter

as per Rule

as fitted

Is the tube screw shaft fitted with a continuous liner

Bronze Liners, thickness in way of bushes

as per Rule

as fitted

Thickness between bushes

as per rule

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 disclutched

Means of lubrication

Thickness of cylinder liners

Are the cylinders fitted with safety valves

Are the exhaust pipes and silencers water cooled or lagged with

non-conducting material water and 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 fitted to the Main Engines, No. 1

Diameter 80

Stroke 40

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 Engine and Boiler Room

In Holds, &c.

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

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

Are the Bilge Suctions in the Machinery Space

led 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.

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.

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.

Total cubic capacity

Internal diameter

thickness

Seamless, lap welded or riveted longitudinal joint

Material

Range of tensile strength

Working pressure by Rules



U11344-0190

If so, is a report now forwarded?

DESCRIPTION.	DATE OF TEST.	WORKING PRESSURE.	TEST PRESSURE.	STAMPED.	REMARKS.
ENGINE CYLINDERS	19/2.26	16 atm	32 atm	4/15/16/17/28	Good
" " COVERS	19/2.26	16 atm	32 atm	Exh. 19.2.26	"
" " JACKETS.....	"	"	"	32 atm	"
" " PISTON WATER PASSAGES.....	"	"	"	"	"
MAIN COMPRESSORS—1st STAGE.....	"	"	"	"	"
" " 2nd "	"	"	"	"	"
" " 3rd "	"	"	"	"	"
AIR RECEIVERS-STARTING	"	"	"	"	"
" " INJECTION	"	"	"	"	"
AIR PIPES	24/2.26	16 atm	32 atm	"	"
FUEL PIPES	24/2.26	10	10	"	"
FUEL PUMPS	24/2.26	10	10	"	"
SILENCER	24/2.26	42 atm	3 atm	4/10/1. r.w. 13.	"
" " WATER JACKET	"	"	"	24/2.26	"
SEPARATE FUEL TANKS	"	"	"	3. atm	"

Separate Tanks

The foregoing is a correct description,

Manufacturer.

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

Is this machinery duplicate of a previous case Yes If so, state name of vessel Belknap CR# 3012. approx 24.11.26.

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

The oil engines have been built under Special Survey in accordance with the approved plans and Secretary's letter, material tested as required.

Engines tested under full working conditions as

Whose engines have been forwarded to Kobe (Japan) by the SS "Tajima Maru" on the 12th of March last.

A. W. Bennett
Engineer Surveyor to Lloyd's Register of Shipping.

3 SEP 1928

Kobe Rpt No 5360