

PORT OF SURVEY FOR REPAIRS, &c., OF ENGINES AND BOILERS

(Received at London Office)

Writing Report 28th May 1941 When handed in at Local Office 28th May 1941 Port of BELFAST

Survey held at Belfast Date First Survey 1st April Last Survey 21st May 1941
(No. of Visits 26)

on the Machinery of the Wood, Iron or Steel M.V. "WOENSORECHT" Year. Month.

Gross 4668 Vessel built at Rotterdam By whom Maats. J. J. J. J. When 1926-3
Net 2627 Engines made at " By whom " When "

Boilers, when made (Main) " (Donkey) 1926 (2 frs) 1927 (1 aft)

Owners N.V. Maats. M.S. "Woensorecht" Owners' Address "
Managers Van Ommen's Schap. Belfort Port Rotterdam Voyage "

If Surveyed Afloat or in Dry Dock " (State name of Dock.)

Particulars of Classification (which must be inserted precisely as in Register Book & Supplements).

Report No. " Port " Damage, "

Particulars of Examination and Repairs (if any) C.S. & D.B.S.

Surveyors, when held, must be reported in detail and serially in the terms of the Rules. State clearly the nature and extent of examinations and subsequent repairs. Repairs on damage (the cause of which must be stated) should be separated from repairs due to other causes; and being detailed in the body of the report, should be briefly summarised at the end of the report. State also the initials of any letters respecting this case.

age cases where the Surveyor has not made a special damage report he is required to state whether he has declined his services for this purpose, and why they were declined. Not required

damage report made by anyone else? If so, by whom? Maats. J. J. J. J.

Surveyor personally go inside each Main Boiler separately and make a thorough examination at this time? Yes

Donkey " Yes

as not done, state for what reasons "

at parts of the Boilers could not be thus thoroughly examined? "

at special means, in the absence of internal examination, were adopted by the Surveyor to assure himself of the thorough efficiency of those parts of each Boiler? "

test date of internal examination of each boiler 4, 42

Surveyor examine the Safety Valves of the Main Boiler? Yes

Surveyor examine the Safety Valves of Donkey Boiler? Yes

Surveyor examine all the manholes, doors and their fastenings of the Main Boilers? Yes

Surveyor examine the drain plugs of the Main Boilers? Yes

Surveyor examine all the mountings of the Main Boilers? Yes

screw shaft now been drawn and examined? Yes Is it fitted with continuous liner? Yes

It now been changed? No If so, state reasons "

shaft now fitted been previously used? " Has it a continuous liner? Yes

ate of examination of Screw Shaft 4, 42 State the distance between lignum vitae or bearing metal of stern bush and top of after bearing of screw shaft Renewed

Engine parts, when referred to by numbers, should be counted from foreward "

Did the Surveyor examine the generators, motors, switchgear, cables and fuses? Yes

Insulation resistance of the generators, circuits and apparatus been tested and found to be not less than 100,000 ohms? Yes

Survey is not complete, state what arrangements have been made for its completion and what remains to be done Complete

Damage for damage Rotterdam due to enemy action (bombing) on the 27th Dec. 1940.

This is understood to have arisen from the same cause but to have been discovered subsequently to the damage done to in London Rpt. No. 109435

The bear plate of the steam dynamo engine was found cracked through forward main bearing girders and was permanently repaired

steel plates, fitted to place, and bolted on each side of the girders

the fitted bolts. The bearing was re-metalled.

The bear plate of the oil dynamo engine was found extensively cracked

the after end. Patching being impracticable, the cracks (P.T.O.)

General Observations, Opinion, and Recommendation:— The machinery of this Vessel,

(State clearly what alteration, if any, is suggested to be made in the existing classification of the vessel's machinery in the Register Book, consequent upon this survey, and also any alteration required to be made in the records of the vessel's machinery, boilers, working pressures, &c.; thus, for example, B.S. 9,11, B.&M.S. 9,12, L.M.C. 9,11, or

L.M.C. 110 lb., F.D., &c.)

Now seen, is in good condition and eligible in my opinion to remain as

used with fresh records of D.B.S. 5,42 and screw shaft seen 4,42

(the continuous survey cycle being complete) + L.M.C. - C.S. (with dates)

sent to the bear plate (welded 5,42) of the oil dynamo engine being

examined before the end of 5,43

C.S. See letter

B.S. 5

al Damage or Repair Fee (if any) £ 4 - - - 19

ECT. INSTAL. (30 K.W.) - £ 36 - 36 - 6

elling expenses (if chargeable) £ - : 4 : 9

LICENCE CASE

Committee's Minute

signed

+ L.M.C. C.S. 5,42 Subject

DBS 5,42

John McAfee
Engineer Surveyor to Lloyd's Register of Shipping.

Lloyd's Register
W 134-048 (12)

Insert Character of Ship and Machinery precisely as in the Register Book

Is a Certificate required? If so, to be sent to

were vee'd out as far as possible and electrically welded, using special electrodes suitable for cast iron. The main bearings were re-metalled and the crankshaft bedded in. It is considered the bedplate should be re-examined before the end of 5.43.

Now done for D.B.S. All three donkey boilers were examined throughout together with their doors and mountings and found or placed in good condition. Some tubes were expanded, caulked, overhauled and other minor repairs effected. On conclusion the two oil fired boilers were examined under steam and the safety valves adjusted to 142 lb./sq. in. The exhaust gas fired donkey boiler was tested by hydraulic pressure to 142 lb./sq. in. and the safety valves were adjusted at this pressure. The oil burning installation and steam smothering arrangements were examined and tested in accordance with Circular No 1748.

Now done for C.S. - The following parts examined & found or placed in order:

All main engine cylinders, pistons, covers, valves and valve gear.
The intermediate shaft, screw shaft, propeller, stern bush, sea connections and their fastenings.
The main engine blast air compressor coolers (tested)
The two main engine blast air bottles.
The steam driven dynamo engine
The oil engine dynamo engine
The oil engine driving the air, condenser circulating, general service and feed pumps
The oil engine driving the circulating water, piston cooling water and lubricating oil pumps for the main engine
The steam engine driving the spare circulating water, piston cooling water and lubricating oil pumps for the main engine.
The starting air bottle for the auxiliary oil engines.
The fresh and salt water cooling, lubricating oil, bilge and ballast pumps (including spare pumps).
The pumping arrangements.
The condenser (tested), steam pipes (1 length removed, stripped and tested) and the air, circulating and feed pumps.
The oil fuel service tanks and fittings
The oil burning pumps and installation and the dock controls for oil outlet valves and steam fire extinguishing.
The two dynamos and electric motors and general electrical installation - insulation tested and found or made not less than 100,000 ohms.
Manoeuvring of main engine tried under working conditions.

(Continued on Rpt. 9a)

M.V. "WOENS DRECHT"

Repair (Wear & tear)

All main engine cylinder liners renewed.

The main engine pistons had previously been fitted with sleeves made slightly oversize on account of liner wear (the worn liners had apparently been bored out). Four of these sleeves were skinned up to suit the new liners (which are of the original diameter - 700 mm) and the remaining two sleeves were renewed, the ring grooves being worn excessively. New piston rings were fitted.

The fuel valve housings in Nos. 4 & 5 cylinders covers were bored out and fitted with screws in liners on account of slight porosity in the castings.

The piston cooling pipes and fittings were overhauled.

The main engine valves, cylinder lubricator, indicator fittings and other attachments were overhauled and adjusted.

The cast iron propeller was replaced by one of bronze made at York, Glyn and Mark Lloyds No. 45357 20/2/42.

The stern bush was rewooded.

The steam engine for dynamo was completely overhauled, a new piston and slide valve being fitted. The bed plate was repaired as stated under "Damage" and all adjustments and alignment checked.

The oil dynamo engine was completely overhauled and fitted with a new piston and top end pin. The bed plate was repaired as stated under "Damage".

The oil engine driving the working circulating water, piston cooling water and lubricating oil pumps was completely overhauled, the crankshaft machined, bearings re-metalled and a new liner and piston fitted.

The driving shaft for the working lubricating oil pump was renewed and re-bushed.

The driving shaft for the spare lubricating oil pump was machined and re-bushed.

The spare piston cooling pump impeller shaft was renewed.

Fifteen tubes were renewed in the condenser.

The working feed pump plunger was renewed.

A 5" dia. bilge suction with screw down non-return valve was fitted to the main cooling water pump suction port side and marked "for emergency use only".

One new main engine air compressor cooler body was fitted.

The electrical installation was generally overhauled, armature and field coils of dynamos were remanufactured and baked where necessary and some defective lighting cable renewed. The insulation was tested on completion and found in order. It was noted the cargo pump room

was wired throughout for electric light and this has now been disconnected.

Other minor repairs were effected.

On completion of repairs a basin trial of the main and auxiliary machinery was held and all functioned satisfactorily.

The vessel later prepared for sea but on proceeding out of Belfast Harbour one of the main engine pistons gave signs of seizure and the vessel returned to port. Subsequent investigation revealed that the piston clearance was insufficient and it was eventually found necessary to re-machine four of the pistons to reduce their diameter. During this time trouble was also experienced with the top end bearing of the oil dynamo engine which overheated. This was eventually overcome by adjustment of oil scraper rings and passages and reduction of maximum cylinder pressure. A full power sea trial of main and auxiliary machinery was finally held, lasting for about 8 hours, and all found satisfactory.

J. McC.