

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

24 JUL 1953

Date of writing Report **9th July 53** When handed in at Local Office **HAMBURG**

No in Reg. Book. **07483** Survey held at **HAMBURG** Date: **First Survey 2nd June Last Survey 3rd July 19 53**

57325 on the Machinery of the **S.S. "DELPHAVEN"**

Gross Tonnage **7036** Vessel built at **South Shields** By whom **J. Readhead & Sons Ltd.** Year **1942** Month **7**
 Net Tonnage **4933** Engines made at **Newcastle** By whom **N.E. Marine Eng. Co. Id.** When **1942**
 Nominal Horse Power **510 MN** Boilers, when made (Main) **1942** (Donkey) **-**
 Owners **N.V. Gebr. Van Uden & Scheepv. en** Owners' Address **-**
 No. of Main Boilers **3 SB** Managers **Argentuur Maats.** (if not already recorded in Appendix to Register Book.)
 No. of Donkey Boilers **-** Port **Rotterdam** Voyage **-**
 Steam Pressure in Main Boilers **220 lb.** If Surveyed Afloat or in Dry Dock **Both**
 in Donkey Boilers **-** (State name of Dock) **Howaldtswerke A.G.**

Last Report No. **-** Port **-**
 Particulars of Examination and Repairs (if any) **Docking, BS, O.F. Conversion**
 (Periodical Surveys, when held, must be reported in detail and seriatim in the terms of the Rules. State clearly the cause of Repairs, if any, and, in detail, the nature and extent of Examinations and subsequent Repairs. Repairs on account of Damage (the cause of which must be stated) should be separated from Repairs due to other causes; and besides being detailed in the body of the report, should be briefly summarised at the end of the report. State also the dates and initials of any letters respecting this case)

In damage cases where the Surveyor has not made a special damage report he is required to state whether he offered his services for this purpose, and why they were declined. **no damage**
 Was a damage report made by anyone else? If so, by whom? **-**
 Did the Surveyor personally go inside each Main Boiler separately and make a through examination at this time? **yes**
 " " Donkey Boilers? **none**
 If not, state for what reasons **-** What parts of the Boilers could not be thus thoroughly examined? **-**
 What 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? **-**
 State latest date of internal examination of each boiler **17-6-53** Present condition of funnel(s) **efficient**
 Did the Surveyor examine the Safety Valves of the Main Boilers? **yes** To what pressure were they afterwards adjusted under steam? **220 lb.**
 Did the Surveyor examine the Safety Valves of the Donkey Boilers? **-** To what pressure were they afterwards adjusted under steam? **-**
 Did the Surveyor examine all the manholes, doors and their fastenings of the Main Boilers? **yes** and of the Donkey Boilers? **-**
 Did the Surveyor examine the drain plugs of the Main Boilers? **none** and of the Donkey Boilers? **-**
 Did the Surveyor examine all the mountings of the Main Boilers? **yes** and of the Donkey Boilers? **-**
 Has the screw shaft now been drawn and examined? **no** Has it a continuous liner? **-** Is an approved oil retaining appliance fitted at the after end? **-**
 Has shaft now been changed? **-** If so, state reasons **-** Has the shaft now fitted been previously used? **-** Has it a continuous liner? **-**
 Is an approved oil retaining appliance fitted at the after end? **-** State date of examination of Screw Shaft **not examined** State the wear down in the stern bush **5 mm** Is electric light and/or power fitted? **yes** If so, did the Surveyor examine the generators, motors, switchgear, cables and fuses? **no**
 Has the insulation resistance of the generators, circuits and apparatus been tested and found to be not less than 100,000 ohms? **no**

Engine parts, when referred to by numbers, should be counted from forward. Auxiliary machinery should be referred to by position in Machinery Space.
 If the Survey is not complete, state what arrangements have been made for its completion and what remains to be done. **Complete.**

NOW DONE FOR DOCKING
 Vessel placed in drydock. Examined propeller, and outside fastenings of sea connections and placed in a satisfactory condition.

NOW DONE FOR BOILER SURVEY
 Port, starboard and centre boilers examined internally and externally with mountings, manholes, doors and their fastenings and found or placed in a satisfactory condition. Safety valves adjusted under steam as noted.

REPAIRS - Machinery
 The spare propeller nut has been fitted to the tail shaft (old one found badly corroded) and a new nut of tested S.M. steel has been fitted to the spare propeller shaft on board.

REPAIRS - Boiler
 Minor repairs to boiler mountings effected. Two stay nuts renewed and a few tubes

General Observations, Opinion, and Recommendation. — **p.t.o. no**
 (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, BS 9,11, B&MS 9,11, LMC 9,11 or LMC 140 lb., FB, &c.)
CS 3,34
 The machinery of this vessel, where now seen, is in efficient condition and eligible, in my opinion, to remain as now classed with fresh records of BS **6,53** and the notation "Fitted for oil fuel 7,53 F.P. above 150°F."

Survey Fee (per Section 29) **BS 18.15.0**
 Oil Fuel Conversion **£51. 0. 0**
 Installation Superheaters **£40.0.0**
 Travelling expenses (if chargeable) **£ 8:10.0**

Committee's Minute **TUESDAY 18 AUG 1953**
 Assigned **BS 753**
Fitted fuel fuel 7,53 F.P. above 150°F.

W. O. Galbraith
 Engineer Surveyor to Lloyd's Register of Shipping.

Lloyd's Register of Shipping
 Foundation
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 0119-72
 p.t.e

re-expanded in the centre boiler centre furnace; all tubes re-expanded in the inboard furnace.

NOW DONE FOR OIL FUEL CONVERSION AND ALTERATION

The boilers have been fitted with superheaters (Schmidt Patent) at this time and the superheater headers and superheater elements are of tested materials and fitted as follows: -

- Port boiler port and starboard side headers:
 - Lloyd's Test 9, 10, 11, 12 T.P. 46 Atm., W.P. 15,4 Atm.
 - W.S. 23.4.53, p w p 15072, Charge 36310,
 - Lloyds M II TUG, RBP 3 4.3.53

Centre boiler

- Lloyd's Test 7, 8, 3, 4 T.P. 46 Atm. W.P. 15,4 Atm.
- W.S. 28.4.53 and 7.5.53.

Starboard boiler

- Lloyd's Test 1, 2, 5, 6 T.P. 46 Atm., W.P. 15,4 Atm.
- W.S. and J.L. 7.5.53 and 23.4.53.

All supplied by Schmidt'sche Heißdampf-Gesellschaft m.b.H., Kassel-Wilhelmshöhe.

Each boiler is fitted with 4 headers and the headers also fitted with steel drain valves.

The superheater elements are seamless tubes with 24 x 19 mm diameter. The new saturated and superheated steam steel pipes are of tested material and all hydraulically tested on completion to 50 kg/cm², found sound and tight and the workmanship good. For identification purposes all flanges are stamped.

The distribution valve chest for the superheated steam lines of all three boilers is fitted with two saturated mixing valves for steam to main engine.

Three superheated steam steel valves for each boiler (Marked Lloyds Test T.P. 64 Atm. HMD 29.4.53), two saturated steam steel valves from the auxiliary steam line (marked Test 3207 AK 32 Atm. 9.4.53), and one superheated main stop steel valve to main engine (marked Test 3207 AK 32 Atm. 9.4.53) are all of tested steel. Each boiler is also fitted with a tested cast steel safety valve for superheater.

A new manoeuvring valve, fabricated by electric welding process is also fitted to the main engine (see attached Rpt. No. 2341).

The HP cylinder and valve chest are fitted with new Perlit liners because the engine is now running with superheated steam.

A new feed heater (330585/21203/78 TUS, steam side 5 Atm., T.P. 10 Atm., water side 16 Atm., T.P. 40 Atm.) and a new feed pressure filter (4016 Lloyds Test 40 Atm. W.P. 16 Atm. 18.4.53 AK) have now also been fitted and a new horizontal condenser cooling water and air pump

- L.P. 3112 L.T. 4 Atm. 14.4.53 W.F.C.
- D.Z. 3112/3 L.T. 28 Atm. 29.4.53 W.F.C.
- C.P. 3112 L.R. 4 Atm. 14.4.53 W.F.C.

has been fitted on a strong seating on port aft side of the engine room and connected to the auxiliary condenser.

S.S. " DELFHAVEN "

This vessel has been converted to oil fuel burning now the existing coal bunkers have been arranged as port, centre and starboard cross bunkers, and two settling tanks of 12 tons capacity each have been placed in the centre cross bunker.

Also the double bottom tank No.4 (p. & s.) and the main part of the dry tank have been altered to carry fuel oil. The aft last frame of the dry tank is a cofferdam between fuel and fresh water. All fuel tanks are fitted with heating coils of tested material and the returns of these coils are led to the observation tank, placed on port side of engine room and also fitted with illuminated sight glasses.

The ballast and fore peak pipes removed from the double bottom tanks and replaced by steel in a special pipe tunnel between the centre cross bunker in which the steam and exhaust lines are placed.

All tanks are fitted with air and sounding pipes and the cross bunkers and settling tanks are also fitted with pneumercators.

The overflow line from settling tanks fitted with illuminated sight glasses and non-return valve to double bottom tank; light points also placed on tank top under boilers. Satisfactory oily-bilges fitted in cargo hold and boiler room.

Bilge suctions from oily bilges are connected to transfer and hand pump with non-return valves. The discharge lines of both pumps passing through an oil separator placed on a new seating port side of boiler room.

Sufficient steam smothering lines under boilers and all bunker valves are fitted with control rods to deck.

Two new fire extinguishers, two new water hose connections and also two sand boxes in boiler room are supplied.

The complete Oil fuel conversion is satisfactorily installed in accordance with the approved plans, the Secretary's letters and the Rule Requirements.

The boiler fronts removed and new boiler fronts of an approved Howden type have been installed. On completion the oil fuel arrangement has been satisfactorily tested under forced and natural draught conditions and found good.

Steam smothering arrangements verified and control rods checked, and all found in satisfactory condition.

All lead pipes and woodwork removed and replaced by steel, funnel damper not fitted.

ADDITIONAL MACHINERY.

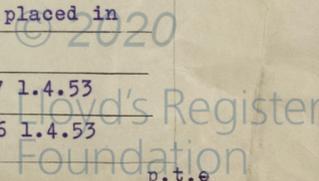
Note All boilers are fitted with superheaters.

One oil fuel pressure pump unit (two pumps and heaters) placed in boiler room starboard forward side

top heater Lloyds No. 26584 F 3529/1619 Type No. 87 1.4.53

lower heater Lloyds No. 26258 F 3529/1619 Type No. 86 1.4.53

coils and space tested 400 lb.



" DELFSHAVEN "

pressure pumps: steam side 265354 L.T.500 lb.
265353 23/24.3.53
oil side 265354 L.R.600 lb.RM^oL
265353 23.5.53

One new fuel transfer pump, single piston Weir type, placed port side forward boiler room.

oil side 273946 Lloyds RM^oL 500 lb. 12.3.53
steamside 273946 Lloyds RM^oL 500 lb. 12.3.53

One lighting up set supplied with hand pressure unit, placed on starboard side of boiler room.

One Turbulo oil separator and one hand operated 1 3/4" oily bilge pump, both placed port side of boiler room.

One new horizontal tandem type cooling water and air pump Lloyds No. 3112 - 12/3 T.P. 28/4 Atm.
14 - 29.4.53 W.F.C.

placed in engine room port side aft.

One new feed pressure filter and one new feed heater

4016 Lloyds Test 40 Atm. W.P.16 A.K.18.4.53
330 585/21203 78 TUS W.P. 5/16 T.P. 10/40 Atm.

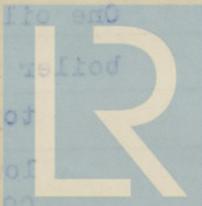
One new light fuel tank for Galley consumption of a stated capacity of 7000 ltrs. placed on stbd. side tween deck (Galley fitted for fuel oil).

One new light fuel tank for lighting-up boilers of a stated capacity of 1,5 tons placed in stbd. boiler room.

ADDITIONAL MACHINERY.

Note All boilers are fitted with superheaters.

One oil fuel pressure pump unit (two pumps and heaters) placed in boiler room starboard forward side
top heater Lloyds No. 26284 P 3529/1619 Type No. 27.1.4.53
lower heater Lloyds No. 26288 P 3529/1619 Type No. 26.1.4.53
boiler and space tested 400 lb.



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