

Report of Survey for Repairs, &c., of Engines and Boilers.

(Received at London Office 14 OCT 1935)

Date of writing Report 8th October 1935 When handed in at Local Office 8th October 1935 Port of Copenhagen.

Survey held at Copenhagen Date, First Survey 19th August. Last Survey 15th October 1935
(No. of Visits 23)

23 on the Machinery of the Wood, Iron or Steel Sc. "PETER MÆRSK"

Gross 5339 Vessel built at Odense By whom Odense Staalskibeværk When 1932-3mo
Net 3341 Engines made at Cpm. By whom Abt. Bumester & Wain When 1932.

Final Power 983 Boilers, when made (Main) (Donkey) 1935

Main Boilers one Owners S/S Sverdrup of 1/5 of 1912 Owners' Address Port Copenhagen Voyage The far East.

Donkey Boilers one Managers A.P. Møller, Copenhagen If Surveyed Afloat or in Dry Dock On Ponton & afloat. Particulars of Classification (which must be inserted precisely as in Register Book & Supplements).

Donkey Boilers 100 lbs (State name of Dock.) Bumester & Wain Refractor

Report No. _____ Port _____

Particulars of Examination and Repairs (if any) Repairs & S.P.S.

Medical Surveys, when held, must be reported in detail and seriatim in the terms of the Rules. State clearly 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 the details being detailed in the body of the report, should be briefly summarised at the end of the report. State also the names and initials of any letters respecting this case.

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

Has a damage report made by anyone else? If so, by whom? _____

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

Has the Surveyor personally go inside each Donkey Boiler separately and make a thorough examination at this time? _____

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? _____

What is the latest date of internal examination of each boiler? _____

Has the Surveyor examine the Safety Valves of the Main Boiler? _____ To what pressure were they afterwards adjusted under steam? _____

Has the Surveyor examine the Safety Valves of Donkey Boiler? yes To what pressure were they afterwards adjusted under steam? 100 lbs / sq"

Has the Surveyor examine all the manholes, doors and their fastenings of the Main Boilers? _____, and of the Donkey Boilers? yes

Has the Surveyor examine the drain plugs of the Main Boilers? _____, and of the Donkey Boiler? none

Has the Surveyor examine all the mountings of the Main Boilers? _____, and of the Donkey Boiler? yes

Has the screw shaft now been drawn and examined? yes Is it fitted with continuous liner? yes Is an approved appliance fitted at the after end of the shaft to permit of it being efficiently lubricated? _____

Has the shaft now been changed? no If so, state reasons _____

Has the shaft now fitted been previously used? _____ Has it a continuous liner? _____ Is an approved appliance fitted at the after end of the shaft to permit of it being efficiently lubricated? _____

State the date of examination of Screw Shaft 27/8-35 State the distance between lignum vitae or bearing metal of stern bush and top of after bearing of screw shaft 5.4 cm

Engine parts, when referred to by numbers, should be counted from forward. Is electric light and power fitted? yes

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

Repairs due to Wear & Tear.

Main engine:- All the worn out cylinder liners & pistons with piston rod & leaves renewed.

All the worn out bottom exhaust piston valve cylinders & piston valves renewed with their piston rod glands

All the worn out top end exhaust piston valve cylinders renewed, the piston valves dressed in way of ring grooves

All piston & piston valve packing rings renewed.

All the lower bearing frames for the cylinders which were found cracked in way of holes for stay bolts renewed.

The slide valve gear overhauled & rebushed where necessary

The turning wheel, which was found defective in way of bell, renewed

General Observations, Opinion, and Recommendation:—

(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. 9,11, L.M.C. 9,11, or L.M.C. 140 lb., F.D., &c.)

Recommend the vessel's machinery to remain as now classed in the Register Book and to have notation of L.M.C.-10.35 NDB-35 and tail shaft seen 8.35

Survey Fee (per Section 29) 704.80
Special Damage or Repair Fee (if any) (per Section 29) _____
Travelling expenses (if chargeable) 2.00

Fees applied for 11.10 1935
Received by me 28.10 1935

S. Langkilde Jensen Engineer Surveyor to Lloyd's Register of Shipping.
C.B. Nielsen Chief Engineer
TUE. 24 DEC 1935
FRI. 17 APR 1936
FRI. 8 MAY 1936

Committee's Minute _____
Assigned _____
Danish Ministry. _____

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

OIL ENGINE. CONTINUOUS SURVEY.

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

Lloyd's Register Foundation
TUE. 15 SEP 1936 W208-0129/3

Steel Se. 3000. "PETER MERSK"

all oil fuel injection pumps, overhauled - fitted with plungers & cylinders

The scavenging air blowers overhauled complete - fitted with new shafts & roller bearings, their feathering couplings and the chain gear altered to Bernmeister & Hain's latest design.

The lubricating oil coolers cleaned

All the intermediate shaft bearings removed, scraped over and the oil grooves cut up afresh.

All the pumps overhauled.

All new castings tested by hydraulic pressure by us as required by the Rules.

Auxiliary engines: - The 3 auxiliary engines overhauled complete, all pistons fitted with new piston packing rings, the scavenging air blowers fitted with new thicker shafts & bearing. The lubricating oil coolers replaced by new bigger ones. The centerlines of the crank shafts examined - adjusted where necessary.

All the dynamos - electromotors overhauled & cleaned, the coils & armature laguered when found necessary.

New Installations

In connection with the fitting of the two new deep tanks for vegetable oil, one 3½" bilge suction & one 8" cargo oil suction have been fitted to each tank on the existing suction plants. All the valves are fitted with blank flanging arrangement as required by the Rules and the cargo oil suction valves are geared to deck.

In order to supply steam to the extra heating coils in the new deep tanks, the old donkey boiler has been replaced by a bigger one. A special report on the new donkey boiler is forwarded herewith.

A fresh water cooling system for the main engine has been installed including a new fresh water centrifugal cooling pump and a fresh water cooler.

The electric installations has been extended as per special report herewith.

Special Periodical Survey

The following parts have now been opened up examined & found good: Main engine: - All (9) the cylinders, pistons, liners, top & bottom end covers, piston valves & cylinders & the valve gears.

All the connecting & top ends with crossheads, guides, brasses and bolts

All the bottom ends - crank pins, brasses and bolts.

Steel Se. 30th. "PETER MÆRSK"

All the main bearings & crank shaft journals

The thrust shaft & the thrust blocks.

All the intermediate shafts with bearings

The two 2-cylinder and the 3-cylinder auxiliary engines complete with cylinders, pistons, covers, valves, gears connecting rods crank shafts and bearings

The 3 manoeuvring air compressors complete with cylinders pistons, covers, valves, connecting rods & cranks

The riveted starting air receiver & the emergency starting air bottle internally & externally.

The cooling water pumps, the lubricating oil pumps (4), the engine bilge pumps, the bilge & sanitary pump & the ballast pump & the daily service oil fuel pump with their impellers, cog wheels, rotors shafts, plungers, valves & connections.

The pumping arrangements, the tank & bilge suction valves & piping.

The daily service oil fuel tanks internally & externally.

The sea connections & their fastenings

The electric installation tested as per Rules & found good.

The manoeuvring of the main engine tested under working conditions

The propeller shaft drawn in examined & found good with the stern tube, stern bushes lignum vitae & the propeller.

An Interim Certificate has been issued as per copy herewith

J. H. P. C.B.N.