

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

(Received at London Office

14 OCT 1935

Date of writing Report 8<sup>th</sup> October 1935 When handed in at Local Office 8<sup>th</sup> October 1935 Port of Copenhagen.in Survey held at CopenhagenDate, First Survey 19<sup>th</sup> August. Last Survey 15<sup>th</sup> October 1935Book. 23 on the Machinery of the Wood, Iron or Steel Sc. "PETER MÆRSK"(No. of Visits 23.)Gross 5339  
Net 3341Vessel built at OdenseBy whom Odense SkibstøtteriWhen 1932-3moFinal Power 983Engines made at Cpm.By whom Abt. Burmeister & WainWhen 1932.Main Boilers one

Boilers, when made (Main)

(Donkey) 1935Donkey Boilers oneOwners S/S Sundborg of 1/2 of 1912

Owners' Address

Main Boilers oneManagers A. P. Möller, CopenhagenPort CopenhagenVoyage To far East.Donkey Boilers 1002 1/2If Surveyed Afloat or in Dry Dock On Ponton - afloat.

(State name of Dock.)

Burmeister & Wain, Copenhagen

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

CHARACTER.  
Date of last Survey and of Periodical Surveys.

Year added or now expired.

Machinery and Boiler Surveys (including date of N.B., if any).

\*100A1

\*LMC-3.32

with preboard  
12.34

Fitted for carrying oil

7' Above 150' in deep tank

C.L.

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 Repairs, if any, and, in detail, the nature and extent of Examinations and subsequent Repairs. Repairs on 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 the Surveyor has not made a special damage report he is required to state whether he has offered 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?

Donkey " " " "

yes, donkey boiler new

Was not done, 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?

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?

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?

Has the Surveyor examine the drain plugs of the Main Boilers?

and of the Donkey Boiler?

Has the Surveyor examine all the mountings of the Main Boilers?

and of the Donkey Boiler?

Has screw shaft now been drawn and examined?

Is it fitted with continuous liner?

Is an approved appliance fitted at the after end of the shaft to permit of it being efficiently lubricated?

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 appliance fitted at the after end of the shaft to permit of it being efficiently lubricated?

State the distance between lignum vitae or bearing metal of stern bush and top of after bearing of screw shaft.

27/8 - 35

5.4 in

Engine parts, when referred to by numbers, should be counted from forward.

Is electric light and power fitted?

Is 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 & valves 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 \*LMC-10.35 NDB-35 and tail shaft seen 8.35

Survey Fee (per Section 29) 704.80

Fees applied for

Special Damage or Repair Fee (if any) 2.00

Received by me

Travelling expenses (if chargeable)

28.10.1935

Committee's Minute

FRI. 1 NOV 1935

Assigned

+ LMC 10.35

CONFIRMATE WRITTEN

Danish Ministry.

TUE. 24 DEC 1935

FRI. 17 APR 1936

FRI. 8 MAY 1936

TUE. 15 SEP 1936

FRI. 5 FEB 1937

FRI. 19 FEB 1937

Lloyd's Register Foundation

W208-0129 1/3

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

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

OIL ENGINE.  
CONTINUOUS SURVEY.



Steel Se. 3011. "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 Burmeister & Wain'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 centerline of the crank shafts examined - adjusted where necessary.

All the dynamos - electro motors overhauled & cleaned, the coils & armature lacquered where 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. 3rd ed. "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 pumps & the ballast pump & the daily service oil fuel pumps with their impellers, cog wheels, rotor 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. F.* C.B.N.