

REPORT ON OIL ENGINE MACHINERY.

No. 8009

Received at London Office

21 JUL 1929

of writing Report 16th June 1929. When handed in at Local Office

Port of

Copenhagen

Date, First Survey 6th Novr. 1927. Last Survey 6th June 1929

Number of Visits 153.

in Survey held at

Copenhagen

Book.

on the ^{Single} Twin ^{Triple} Screw vessel

ilt at Yokohama

By whom built Messrs Yokohama Dock Co. Ltd. Yard No. 170 When built

By whom made Messrs. A. & W. J. Hain Engine No. 8409 When made 1929

By whom made Messrs. J. & W. Hain Boiler No. 153 When made

mkey Boilers made at

Owners Messrs. Nippon Yusen Kaisha

Port belonging to Tokio

ake Horse Power 16,500

Is Refrigerating Machinery fitted for cargo purposes

Is Electric Light fitted

m. Horse Power as per Rule 3380

ade for which vessel is intended

ENGINES, &c.—Type of Engines Vertical Diesel Oil Engines (Crosshead type) 2 or 4 stroke cycle 4 Single or double acting Double

imum pressure in cylinders 35 kg/cm² Diameter of cylinders 840 mm = 33 1/8" Length of stroke 1500 mm = 59 1/8" No. of cylinders 2 x 8 No. of cranks 2 x 8

an of bearings, adjacent to the Crank, measured from inner edge to inner edge 1190 mm

Is there a bearing between each crank

olutions per minute 115

Means of ignition Air compression Kind of fuel used

rank Shaft, dia. of journals as fitted 570 mm

Mid. length breadth 1130 mm Thickness parallel to axis 355 mm

as per Rule Intermediate Shafts, diameter as fitted

Mid. length thickness 335 mm Thickness around eye-hole 272 mm

as per Rule Intermediate Shafts, diameter as fitted

as per Rule Thrust Shaft, diameter at collars as fitted

as per Rule Intermediate Shafts, diameter as fitted

as per Rule Thrust Shaft, diameter at collars as fitted

as per Rule Intermediate Shafts, diameter as fitted

Is the tube shaft fitted with a continuous liner

as per Rule Intermediate Shafts, diameter as fitted

Is the after end of the liner made watertight in the

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If so, is a report now forwarded?

Receivers

Separate Tanks

Donkey Boilers

General Pumping Arrangements

Oil Fuel Burning Arrangements

SPARE GEAR

Delivered as per accompanying list. —

To be checked when placed on board.

The foregoing is a correct description,

AKTIESELSKABET
BURMEISTER & WAINSKIN- OG SKIBSBYGGERI

Manufacturer.

Dates of Survey while building	<p>During progress of work in shops - 6/14, 16, 18, 22, 24, 30 Feb; 7, 12, 14, 16, 28, 31 Dec 1927 - 2, 5, 6, 7, 11, 16, 23, 24, 31 Jan - 2, 11, 13, 23, 28 Feb - 12, 16, 19, 30 March, 14, 17, 21, 25 April; 10, 11, 19, 22, 29, 30 May - 1, 4, 8, 9, 13, 18, 25, 28 June; 2, 3, 4, 5, 9, 12, 13, 17, 18, 20, 21, 23, 25, 26, 27, 28, 29, 30 July - 1, 2, 4, 6, 8, 9, 14, 13, 16, 18, 22, 24, 27, 28, 29, 30 Aug - 5, 6, 7, 11, 12, 14, 25, 19, 20, 21, 22, 26, 27 Sept</p> <p>During erection on board vessel - 2, 3, 4, 5, 6, 9, 11, 12, 15, 17, 19, 24, 26, 29, 31 Oct; 1, 2, 5, 7, 10, 13, 17, 22, 24, 27, 29, 30 Nov; 4, 5, 7, 11, 13, 19, 27, 31 Dec 1928 - 3, 5, 23, 24, 25, 26 Jan, 4, 5, 27 Feb, 6, 19, 30</p> <p>Total No. of visits 163</p>
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Dates of Examination of principal parts—Cylinders *and* Covers 22/11, 7/12, 28, Pistons 22/11, 7/12, 28, Rods 22/11, 7/12, 28, Connecting rods 22/11, 7/12, 28, Crank shafts 22/11, 7/12, 28, Flywheel shaft ✓ Thrust shaft 22/11, 7/12, 28, Intermediate shafts ✓ Tube shaft ✓

Screw shaft ✓ Propeller ✓ Stern tube ✓ Engine seatings ✓ Engines holding down bolts ✓

Completion of fitting sea connections..... ✓ Completion of pumping arrangements..... ✓ Engines tried under working conditions..... ✓

Crank shaft, Material S.M.I. Steel Identification Mark N:9638 & 9639 Flywheel shaft, Material ✓ Identification Mark ✓

Thrust shaft, Material S.M.I. Steel Identification Mark Nº 9669 29.10.28 Intermediate shafts, Material ✓ Identification Marks ✓

Tube shaft, Material ✓ Identification Mark ✓ Screw shaft, Material ✓ Identification Mark ✓

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

Have the requirements of the Rules for oil fuel pipes and tank fittings been complied with

Is the vessel (not being an oil tanker) fitted for carrying oil as cargo

If so, have the requirements of the Rules been complied with ✓

Is this machinery duplicate of a previous case yes. If so, state name of vessel M/S "KUNGSOLM"

General Remarks (State quality of workmanship, opinions as to class, &c. In accordance with the Rules for Special Survey we have examined the material and workmanship from the commencement of construction of the machinery with access until the running test under full power working condition on the test bed in the shop and found it good and efficient in every respect. The material used in the construction of the engines and the air receivers have been tested as required by the Rules either by us, or as per test certificates produced.

The dimensions are as specified and in accordance with the Rules, the approved plans and as required in Secretary's letters E. dated the 29th Novr. and 19th Decr 1927.

The intermediate and screw shafts, plan of which was approved on the 19th Decr. 27, have not been made here.

Recommend the vessel to have notation in the Register Book of **LMC** - with date, and notation, OIL ENGINES. - when the machinery has been fitted on board under the supervision and tested to the satisfaction of the local Surgeon to this Society.

The ^{4/5} amount of Entry Fee ... *4/5* 87.36

$\frac{4}{5}$ Special ~~for~~ 2686.32

Donkey Boiler Fee ... £ :

Travelling Expenses (if any) *£* 11:00

Late fee - \$90.00

Committee's Minute

Assigned

When applied for,

When received,

TUE. 6 MAY 1930

See yka J.E. Rpt. 4500

A. C. Frick

Engineer Surveyor to Lloyd's Register of Shipping.

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