

REPORT ON OIL ENGINE MACHINERY

No. 109

Received at London Office
Köln

19 JUL 1956

Report 5.6.1956 When handed in at Local Office 19 Port of Köln

Survey held at Köln-Deutz Date, First Survey 28.3.56 Last Survey 4.6.1956 Number of Visits 9

Single on the Twin Screw vessel Tons Gross Net

By whom built Cheoy Lee Shipyard Yard No. 652 When built -

By whom made Klöckner-Humboldt-Deutz AG. Engine No. 2081505-112 When made 6.56

Boiler No. - When made -

Port belonging to -

Is Refrigerating Machinery fitted for cargo purposes - Is Electric Light fitted -

with supercharging Type of Engines Airl. Inj. Heavy Oil Eng. RBV8M 545 2 or 4 stroke cycle 4 Single or double acting single

Indicated Pressure 60 kg/cm² Diameter of cylinders 320 mm Length of stroke 450 mm No. of cylinders 8 No. of cranks 8

Span of bearings (i.e., distance between inner edges of bearings in crank) 346 mm Is there a bearing between each crank yes Revolutions per minute Maximum 675 Service 475

Moment of inertia of flywheel (lbs. in² or Kg. cm²) 5000 kgm² Means of ignition compr Kind of fuel used Diesel

Weight 3300 kg " " " balance wts. (" " " ") appr. 18.2.55

dia. of journals 220 mm Crank webs 210 mm Mid. length breadth 350 mm Thickness parallel to axis -

Intermediate Shafts, diameter 225 mm Thrust Shaft, diameter at collars 27.4.50

Screw Shaft, diameter - Is the (tube) shaft fitted with a continuous liner ()

Liners, thickness in way of bushes as per Rule - Thickness between bushes as fitted - Is the after end of the liner made watertight in the

er boss - If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner -

liner does not fit tightly at the part between the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-

Is an approved Oil Gland fitted at the after

stern tube - If two liners are fitted, is the shaft lapped or protected between the liners - Length of bearing in Stern Bush next to and supporting propeller -

Kind of damper, if fitted vibration damper

Is a governor or other arrangement fitted to prevent racing of the engine - yes Means of

Are the cylinders fitted with safety valves - yes Are the exhaust pipes and silencers water cooled

Working F.W. -

Can one be overhauled while the other is at work -

One capacity 15 m³/h. No other information than above.

How driven -

One driven by main engine 180 ltr.p.min.at 310 rpm.

In pump room -

Are the bilge suction pipes in the machinery spaces led from easily

Are they fixed

Are the overboard discharges above or below the deep water line -

Are the blow off cocks fitted with a spigot and brass covering plate -

How are they protected -

Have they been tested as per Rule -

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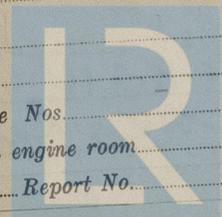
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AIR RECEIVERS:—Have they been made under survey... yes State No. of report or certificate.....
 State full details of safety devices Each receiver head has been equipped with a safety valve.
 Can the internal surfaces of the receivers be examined and cleaned... yes Is a drain fitted at the lowest part of each receiver.....
Injection Air Receivers, No...... **Cubic capacity of each**..... **Internal diameter**..... **thickness**.....
Seamless, welded or riveted longitudinal joint..... **Material**..... **Range of tensile strength**..... **Working pressure**.....
Starting Air Receivers, No. Three **Total cubic capacity** 1250 ltr. **Internal diameter** 160 mm **thickness** 10 mm
Seamless, welded or riveted longitudinal joint welded **Material** SM. Steel **Range of tensile strength** 4753 kg/mm **Working pressure**.....

IS A DONKEY BOILER FITTED..... If so, is a report now forwarded.....
 Is the donkey boiler intended to be used for domestic purposes only.....

PLANS. Are approved plans forwarded herewith for shafting appr. 6.3.53 Receivers 17.9.51 Separate fuel.....
 Donkey boilers..... General pumping arrangements..... Pumping arrangements in machinery space.....
 Oil fuel burning arrangements.....

Have Torsional Vibration calculations are in preparation and will be forwarded as soon as possible characteristics been approved..... Date and particulars of approval 20/8/56

SPARE GEAR.

Has the spare gear required by the Rules been supplied... yes State if for "short voyages" only.....
 State the principal additional spare gear supplied.....

Klöckner-Humboldt-Deutz

[Handwritten signature]
The foregoing is a correct description.

Manufacturer.

Dates of Survey while building
 During progress of work in shops - - 1956 March 28, April 11, 13, 16, 27, 30, May 16, 17, June 4.
 During erection on board vessel - - -
 Total No. of visits 9

Dates of examination of principal parts—Cylinders 11.4.16, 4.17.50, 4.17.51 Covers 30.4.17, 5.17.51 Pistons 17.5.51 Rods - - - Connecting rods - - -
 Crank shaft 13.4.17, 5.17.51 Flywheel shaft - - - Thrust shaft - - - Intermediate shafts - - - Tube shaft - - -
 Screw shaft - - - Propeller - - - Stern tube - - - Engine seatings - - - Engine holding down bolts - - -

Completion of fitting sea connections..... Completion of pumping arrangements..... Engines tried under working conditions.....
 Crank shaft, material SM. Steel Identification mark Lloyd's KLN. 289 W.21. Flywheel shaft, material..... Identification mark.....
 Thrust shaft, material..... Identification mark..... Intermediate shafts, material..... Identification marks.....
 Tube shaft, material..... Identification mark..... Screw shaft, material..... Identification mark.....

Identification marks on air receivers..... LLOYD'S TEST HNO. T.P. 60 ATM. W.P. 30 ATM. H.L. 12.6.56 No. 14896
LLOYD'S TEST HNO. T.P. 60 ATM. W.P. 30 ATM. H.L. 12.6.56 No. 14898
 Welded receivers, state Makers' Name Ruhrstahlwerk A.G. Brackwede LLOYD'S TEST DSF. T.P. 60 ATM. W.P. 30 ATM. K.M. 12.11.52 No. 1658

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.....

Full description of fire extinguishing apparatus fitted in machinery spaces.....
 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.....

What is the special notation desired.....
 If the notation for ice strengthening is desired, state whether the requirements in this respect have been complied with.....

Is this machinery duplicate of a previous case... no If so, state name of vessel.....

General Remarks (State quality of workmanship, opinions as to class, Speed restrictions, &c.....)

This engine has been constructed under special survey of tested materials and is in accordance with the Secretary's letters, approved plans and Rule Requirements. The materials and workmanship are good and the engine when tested in the shops under full and overload conditions, was found to function satisfactorily. The governor tests were also satisfactory. This engine, in my opinion, is suitable for main propelling purpose and when satisfactorily installed and reported will be allowed to receive the notation LMC. (with date).
 Explosion relief devices have been fitted in accordance with the Rules Chapter H. Section 8, Part 1.

The amount of Entry Fee... DM 975.-
 Running Tests... DM 100.-
 Special... £
 Donkey Boiler Fee... DM 108.-
 Travelling Expenses (if any) £

When applied for... 19
 When received... 19

[Handwritten signature]
 Engineer Surveyor to Lloyd's Register of Shipping



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Committee's Minute AKR 316 FRIDAY 23 AUG 1957
 Assigned See HNS Rpt 46 No 13532

Certificates (if required) to be sent to the Secretary of the Committee for Committee's Minute