

4c.

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 93,226

- 6 NOV 1928

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Received at London Office 6 NOV 1928

Survey held at Bedford When handed in at Local Office London

Port of

Date, First Survey 9th May 1928 Last Survey 3rd November 1928

Number of Visits

on the Twin Twin Screw vessel MANUNDATons Gross
Netat Glasgow By whom built John. M. Beardmore & Co. Ltd. Yard No. 651 When builtEngines made at Bedford By whom made Messrs W.H. Allen Sons & Co. Port belonging to Glasgow Contract No. 9960/1928 When made 1928Generators made at Bedford By whom made Messrs W.H. Allen Sons & Co. Contract No. 9960/1928 When made 1928

of Sets 5 Engine Brake Horse Power 1750 Total Nom. Horse Power as per Rule 500 Total Capacity of Generators 200 Kilowatts.

ENGINES, &c. Type of Engines Burmeister - Kain - Diesel. 2 or 4 stroke cycle 4 Single or double acting S.A.maximum pressure in cylinders 570 lbs/in² Diameter of cylinders 325 7/8 in Length of stroke 440 7/8 in No. of cylinders 6 No. of cranks 6of bearings, adjacent to the Crank, measured from inner edge to inner edge 380 mm Is there a bearing between each crank Yesrevolutions per minute 300 Flywheel dia. 1700 7/8 in Weight 8490 lbs Means of ignition Compressed air Kind of fuel used DieselCrank Shaft, dia. of journals as per Rule 186 mm Crank pin dia. 190 mm Mid. length breadth 280 mm Thickness parallel to axis SOLID FORGEDThickness of journals 100 mm Mid. length thickness 100 mm Thickness perpendicular to axis ThicknessWheel Shaft, diameter CRANKSHAFT Intermediate Shafts, diameter as per Rule Thickness of cylinder liners 23.5 mmgovernor or other arrangement fitted to prevent racing of the engine when declutched Yes Means of lubrication Laced, mechanical.

the cylinders fitted with safety valves Yes Are the exhaust pipes and manifolds water cooled or lagged with non-conducting material

Water Pumps, No. 1 Is the sea suction provided with an efficient strainer which can be cleared within the vessel

Reciprocating Oil Pumps, No. and size One per engine, driven through gear from Crankshaft

Compressors, No. One per engine No. of stages Three Diameters 386x344x88 7/8 in Stroke 260 7/8 in Driven by Crankshaft

Engaging Air Pumps, No. ✓ Diameter ✓ Stroke ✓ Driver by ✓

RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule Yes

Are the internal surfaces of the receivers to be examined Yes What means are provided for cleaning their inner surfaces Ends portable

Are a drain arrangement fitted at the lowest part of each receiver Yes

Pressure Air Receivers, No. One per engine Cubic capacity of each 90 litres Internal diameter 9 3/4 " thickness 3/8 "less, lap welded or riveted longitudinal joint Joints Material Steel Range of tensile strength 29/33 7/8 " Working pressure by Rules 1026 lbs/in²

Starting Air Receivers, No. ✓ Total cubic capacity ✓ Internal diameter ✓ thickness ✓

less, lap welded or riveted longitudinal joint ✓ Material ✓ Range of tensile strength ✓ Working pressure by Rules ✓

ELECTRIC GENERATORS:—Type Open Direct or Alternating Current Direct

Voltage of supply 220 volts Load 1000 Amperes Direct or Alternating Current Direct

Alternating current system, state frequency of periods per second ✓

the Automatic Governor been tested and found efficient when the whole load is suddenly thrown on or off Yes

Generators, do they comply with the requirements regarding ratings Yes are they compound wound Yes

less over compounded 5 per cent Level Compounding if not compound wound state distance between each generator Yes

adjustable regulating resistance fitted in series with each shunt field Yes Are all terminals accessible, clearly marked, and furnished with sockets Yes

are so spaced or shielded that they cannot be accidentally earthed, short circuited, or touched Yes Are the lubricating arrangements of the generators as per Rule Yes

NS. Are approved plans forwarded herewith for Shafing (If not, state date of forward) Yes Receivers ✓ Separate Tanks ✓

RE GEAR

See List attached 1/73795.

The foregoing is a correct description,

FOR W.H. ALLEN SONS & COMPANY. LIMITED
H. H. Kimber.

Manufacturer.



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Lloyd's Register
Foundation

Dates of Survey while building
 During progress of work in shops - May 9, June 5, Aug 3, 31, Sep. 8, 14, 17, 22, 29 Oct 5, 11, 16, 26 Nov. 3 1928.
 During erection on board vessel -
 Total No. of visits 14 partial = 6 full.

Dates of Examination of principal parts—Cylinders

Covers

Pistons

Piston rods

Connecting rods

Crank and Flywheel shaft

Intermediate shaft

Crank and Flywheel shaft, Material Steel

Identification Mark

SEE BELOW

Identification Marks

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, etc.)

CRANKSHAFT IDENTIFICATION MARKS:

ENG.A.

LLOYDS

A
1334
22-6-28

ENG.B.

JP

166
LLOYDS
517 RWF
R.W.F.
27-6-28

ENG.C.

LLOYDS

R
1336
17-7-28

ENG.D.

193
LLOYDS

581
RWF
20-7-28

ENG.E.

R

LLOYDS
1364
10-9-28

SPARE.

LLOYD

A
1368
21-9-28

This Machinery has been constructed under special Survey in accordance with approved plans and Rule Requirements. The Workmanship & Materials, so far as can be seen, are good and satisfactory bench trials have been carried out under survey. The five sets which are numbered 99601/A/B/C/D/E have been despatched to Glasgow where they are to be installed and, in my opinion, will be eligible for inclusion in the Classification and record of LMC of the vessel.

The amount of Fee ... £ 50-0-0 When applied for,
6 NOV 1928

Travelling Expenses (if any) £ 8-14-11 When received,
London 22/11/28

Arthur A. Lehner
Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 23 APR 1929

Assigned + LMC K.29.
on Ges. Art 490 pg.

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