

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 95773

Received at London Office 1 DEC 1930

Date of writing Report

19

When handed in at Local Office

DEC 1930

Port of

London

No. in
Reg. Book.

Survey held at

Bedford

Date, First Survey 25th JuneLast Survey 18th Nov

1930

Number of Visits 12

Single
on the Twin
Triple
Quadruple
Screw vesselTons { Gross
Net

Built at

Glasgow

By whom built

Messrs. Barclay, Curle & Co.

Yard No. 644

When built 1930

Owners

Port belonging to

Oil Engines made at

Bedford

By whom made

Messrs. W. H. Allen & Co. Ltd.

Contract No.

K/192/38/B

When made

1930

Generators made at

do

By whom made

do

do

Contract No.

K/192/38/B

When made

1930

No. of Sets 4

Engine Brake Horse Power

800 Total

Nom. Horse Power as per Rule

228

Total Capacity of Generators

520

Kilowatts.

OIL ENGINES, &c.

Type of Engines

Allen-Burmister & Wain

2 or 4 stroke cycle

4

Single or double acting

S.A.

Maximum pressure in cylinders

500 lbs/sq. in.

Diameter of cylinders

325 mm

Length of stroke

370 mm

No. of cylinders

3

No. of cranks

3

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge

400 mm

Is there a bearing between each crank

Yes

Revolutions per minute

400

Flywheel dia.

1540 mm

Weight

4740 lbs

Means of ignition

Compression

Kind of fuel used

Diesel

Crank Shaft, dia. of journals

as per Rule 180 mm

as fitted 190 mm

Crank pin dia.

190 mm

Crank Webs

Mid. length breadth 280 mm

Mid. length thickness

100 mm

Thickness parallel to axis

shrink

Thickness of cylinder liners

Flywheel Shaft

as per Rule

CRANK SHAFT.

Intermediate Shafts, diameter

as per Rule

as fitted

Thickness of cylinder liners

23.5 mm

Is a governor or other arrangement fitted to prevent racing of the engine when declutched

Yes

Means of lubrication

Mechanical forced.

Are the cylinders fitted with safety valves

Yes

Are the exhaust pipes and flues water cooled or lagged with non-conducting material

Cooling Water Pumps, No.

Is the sea suction provided with an efficient strainer which can be cleared within the vessel

Lubricating Oil Pumps, No. and size

One per engine

Air Compressors, No.

One per engine

No. of stages

3

Diameter

260x226x56 mm

Stroke

225 mm

Driven by

Eng. Crankshaft

Scavenging Air Pumps, No.

✓

Diameter

✓

Stroke

✓

Driven by

✓

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

Can the internal surfaces of the receivers be examined

Yes

What means are provided for cleaning their inner surfaces

Inside plugs ends joltable

Is there a drain arrangement fitted at the lowest part of each receiver

Yes

High Pressure Air Receivers, No.

One per engine

Cubic capacity of each

90 litres

Internal diameter

9 3/4"

thickness

3/8"

Seamless, lap welded or riveted longitudinal joint

Seamless

Material

Steel

Range of tensile strength

29/33 T/s

Working pressure by Rules

1026 lbs/sq. in.

Starting Air Receivers, No.

✓

Total cubic capacity

✓

Internal diameter

thickness

Seamless, lap welded or riveted longitudinal joint

Material

Range of tensile strength

Working pressure by Rules

ELECTRIC GENERATORS:—Type

Open

Pressure of supply

220 volts.

Load

591

Amperes.

Direct or Alternating Current

Direct

If alternating current system, state frequency of periods per second

Has 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 rating

Yes

are they compound wound

Yes

are they over compounded 5 per cent.

if not compound wound state distance between each generator

is an adjustable regulating resistance fitted in series with each shunt field

Yes

Are all terminals accessible, clearly marked, and furnished with sockets

Yes

are they 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

PLANS.

Are approved plans forwarded herewith for Shafting

Approved 26-3-29

Receivers

✓

Separate Tanks

✓

SPARE GEAR

As per Drawing K/73789 - 1 Set of list 10.

The foregoing is a correct description,

W. H. ALLEN, & CO., LTD.,

Manufacturer.



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Lloyd's Register
Foundation

W192-0302

Dates of Survey while building { During progress of work in shops - - - } June 25. Sep. 3. 10. 17. 25. Oct. 1. 10. 15. 28. 31 Nov. 11. 18. 1930
{ During erection on board vessel - - - }
Total No. of visits 12 partial = 8 full.

Dates of Examination of principal parts—Cylinders 10-9-30, 17-9-30 Covers 10-9-30, 17-9-30 Pistons 10-9-30, 18-11-30 Piston rods ✓
25-9-30, 1-10-30 1-10-30, 31-10-30

Connecting rods 25-6-30

Crank and Flywheel shaft 10-10-30.

Intermediate shaft ✓

Crank and Flywheel shaft, Material

Best 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, &c.)

Crank Shaft Identification Marks:—

Eng. A.	LLOYDS	Eng. B.	LLOYDS	Eng. C.	LLOYDS	Eng. D.	LLOYDS
ⓔ		ⓔ		ⓔ		ⓔ	
1742		1743		1754		1755	
ⓁⓇ		ⓁⓇ		ⓁⓇ		ⓁⓇ	
10-10-30		10-10-30		10-10-30		10-10-30	

This Machinery has been constructed under Special Survey in accordance with approved plans and Rule Requirements. The Workmanship and Materials, so far as can be seen, are good and satisfactory bench trials have been carried out under survey. The four sets, which are numbered "1/21921/A/B/C/D", have been despatched to Glasgow where they are to be installed on board and, in my opinion, will be eligible for inclusion in the Classification and record of +LMC of the vessel.

The amount of Fee ... £ 22-16-0

When applied for 1 DEC 1930

Travelling Expenses (if any) £ 12-16-4

When received

07 FEB 1931

Arthur D. Palmer.
Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Assigned



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