

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 11,402.

Date of writing Report

10

When handed in at Local Office

11. 3. 1943

Port of

MANCHESTER.

Received at London Office

3 SEP 1943

15 MAR 1943

No. in Survey held at

ASHTON-UNDER-LYNE

Date, First Survey

27.8.42

Last Survey

18.1. 1943.

Reg. Book.

Single

on the Twin

Triple

Quadruple

Screw vessel

EMPIRE VICEROY.

Number of Visits

Six.

Tons

Gross

Net

Built at

BARROW IN FURNESS.

By whom built

Vickers Armstrongs Ltd.

Yard No.

858

When built

Owners

Port belonging to

Oil Engines made at

Ashton-u-Lyne

By whom made

National Gas & O.E.Co.Ltd

Contract No.

54038.

When made

1943.

Generators made at

Birmingham.

By whom made

General Electric Co. Ltd.

Contract No.

55861/3

When made

1942.

No. of Sets

1

Engine Brake Horse Power

300

Nom. Horse Power as per Rule

49

Total Capacity of Generators

180

Kilowatts.

OIL ENGINES, &c.—Type of Engines

Heavy Oil Engine Vertical.

2 or 4 stroke cycle

4

Single or double acting

Single.

Maximum pressure in cylinders

800 lbs/sq"

Diameter of cylinders

10"

Length of stroke

13"

No. of cylinders

5

No. of cranks

5

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

12.3/8"

Is there a bearing between each crank

Yes.

Revolutions per minute

550

Flywheel dia.

3'7"

Weight

2600 lbs.

Means of ignition

Compression

Kind of fuel used

Diesel Oil.

as per Rule

Approved.

Crank Shaft, dia. of journals

7.25"

as fitted

7"

Crank pin dia.

7"

Mid. length breadth

2.15/16"

Crank Webs

Mid. length thickness

8 1/2"

shrink

Thickness parallel to axis

-

Thickness around eyehole

Solid.

as per Rule

Flywheel mounted

on Crank-

Intermediate Shafts, diameter

as per Rule

-

as fitted

-

Thickness of cylinder liners

13/16"

as fitted

shaft coupling.

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

Yes.

Means of lubrication

Forced Lubrication.

Are the cylinders fitted with safety valves

Yes.

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

Water Cooled.

Cooling Water Pumps, No.

One incorporated

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

Lubricating Oil Pumps, No. and size

One incorporated with Engine.

Air Compressors, No.

-

No. of stages

-

Diameters

-

Stroke

-

Driven by

-

Scavenging Air Pumps, No.

-

Diameter

-

Stroke

-

Driven by

-

AIR RECEIVERS:—Have they been made under Survey

-

State No. of Report or Certificate

-

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

Can the internal surfaces of the receivers be examined

-

What means are provided for cleaning their inner surfaces

-

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

-

High Pressure Air Receivers, No.

-

Cubic capacity of each

-

Internal diameter

-

thickness

-

Seamless, lap welded or riveted longitudinal joint

-

Material

-

Range of tensile strength

-

Working pressure by Rules

-

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

Compound wound, continuous rating, fan ventilated.

Pressure of supply

220

volts.

Full Load Current

820

Amperes.

Direct or Alternating Current

D.C.

If alternating current system, state the periodicity

-

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

Yes.

Generators, are they compounded as per rule

Yes.

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

-

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

If the generators are under 100 kw. full load rating, have the Makers supplied certificates of test

-

and do the results comply with the requirements

-

If the generators are 100 kw. or over have they been built and tested under survey

Yes.

PLANS. Are approved plans forwarded herewith for Shafting

6.1.42.

Receivers

-

Separate Tanks

-

(If not, state date of approval)

SPARE GEAR AS PER RULE REQUIREMENTS.

The foregoing is a correct description,

THE NATIONAL GAS AND OIL ENGINE Co. Ltd.

Manufacturer.



© 2021

Lloyd's Register
Foundation

012019-012026-0245

Dates of Survey while building { During progress of work in shops - - } 27.8.42, 4.9.42, 21.9.42, 9.10.42, 15.1.43, 18.1.43.
{ During erection on board vessel - - - }
Total No. of visits 6

Dates of Examination of principal parts—Cylinders 21.9.42. Covers 9.10.42. Pistons 18.1.43. Piston rods -
Connecting rods 18.1.43. Crank and Flywheel shafts 27.8.42. Intermediate shafts -
Crank and Flywheel shafts, Material S.M. Steel. Identification Marks Engine No. 54038.
LLOYD'S 1218 - DRW - 27.8.42.
Intermediate shafts, Material - Identification Marks -
Identification marks on Air Receivers -

Is this machinery duplicate of a previous case Yes. If so, state name of vessel See Engine No. 54037 for same vessel

General Remarks (State quality of workmanship, opinions as to class, &c. THIS ENGINE HAS BEEN CONSTRUCTED UNDER SPECIAL SURVEY OF TESTED MATERIALS AND IN ACCORDANCE WITH THE SECRETARY'S LETTERS, APPROVED PLANS AND THE RULE REQUIREMENTS. THE WORKMANSHIP AND MATERIALS ARE GOOD AND THE ENGINE, WHEN TESTED IN THE SHED UNDER FULL LOAD CONDITIONS, GAVE SATISFACTORY RESULTS. IN MY OPINION, THIS ENGINE IS SUITABLE TO BE PLACED ON BOARD A VESSEL CLASSED WITH THIS SOCIETY FOR THE PURPOSE INTENDED.

Satisfactorily fitted on board.
E. J. Knowles
Barrow.

SEE MANCHESTER RPT. NO. 11,403.
The amount of Fee ... £ : : When applied for, 19...
Travelling Expenses (if any) £ : : When received, 19...

E. J. Knowles, for self & D. R. Walburn.
Surveyors to Lloyd's Register of Shipping.

Committee's Minute TUES. 14 SEP 1943

Assigned

see minute on Rev J. E. Rpt.



© 2021

Lloyd's Register Foundation