

21 JUL 1949

IND. 49.

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 118421.

Date of writing Report 9-6-1949 When handed in at Local Office 9-5-1949. Port of London.
 No. in Survey held at London Date, First Survey 19th May Last Survey 2nd June 1949
 Reg. Book. on the Single Screw vessel Triple Number of Visits 3
 Built at By whom built Yard No. When built
 Owners Port belonging to
 Oil Engines made at Dagenham By whom made Russell Newbery, Ltd. Engine No. 441/8. Contract No. 22201 When made 1949
 Generators made at By whom made Contract No. When made
 No. of Sets 1 Engine Brake Horse Power 66 M.N. as per Rule Total Capacity of Generators 35 Kilowatts.
 Is Set intended for essential services.

OIL ENGINES, &c.—Type of Engines High Speed compression ignition 2 or 4 stroke cycle 4 Single or double acting Single
 Maximum pressure in cylinders 850 lb./sq. in. Diameter of cylinders 5 1/8" Length of stroke 7 1/4" No. of cylinders 4 No. of cranks 4
 Mean indicated pressure 105 Firing order in cylinders 1,3,4,2 Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 6 3/8"
 Is there a bearing between each crank Yes Moment of inertia of flywheel (16 m² or Kg.-cm.²) 66564 Revolutions per minute 1000
 Flywheel dia. 28" Weight 535 lb. Means of ignition Compression Kind of fuel used Pool diesel oil.

Crank Shaft, dia. of journals as per Rule as approved. 3 3/4" Crank pin dia. 3 5/8" Crank Webs Mid. length breadth 4 5/8" Thickness parallel to axis } Solid.
 as fitted Mid. length thickness 1.55" shrunk Thickness round eye-hole }

Flywheel Shaft, diameter as per Rule Intermediate Shafts, diameter as per Rule General armature, moment of inertia (16 m² or Kg.-cm.²) as fitted

Are means provided to prevent racing of the engine when de-clutched Yes Means of lubrication Forced Kind of damper if fitted None
 Are the cylinders fitted with safety valves No Are the exhaust pipes and openers water cooled or lagged with non conducting material Yes

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

Lubricating Oil Pumps, No. and size 1 gear type operating at 3/4 engine speed, capacity 3.6 gals./min.

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

Pressure of supply volts Full Load Current Amperes Direct or Alternating Current

If alternating current system, state the periodicity Has the Automatic Governor been tested and found as per Rule when full load is suddenly thrown

on and off Generators, are they compounded as per Rule is an adjustable regulating resistance fitted in series with each shunt field

Are all terminals accessible, clearly marked, and furnished with sockets Are they so spaced

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

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

Details of driven machinery other than generator

PLANS.—Are approved plans forwarded herewith for Shafting Receivers Separate Tanks
 (If not, state date of approval)

Have Torsional Vibration characteristics if applicable been approved Armature shaft Drawing No.
 (state date of approval)

SPARE GEAR maker's supply covers Rule Requirements.

The foregoing is a correct description,

T. J. Duffin

Manufacturer.

FOR & ON BEHALF OF RUSSELL NEWBERY & CO. LTD.



© 2021

Lloyd's Register
Foundation

013008-013017-0096

Dates of Survey while building During progress of work in shops - - During erection on board vessel - - Total No. of visits 3

19th - 26th May and 2nd June 1949.

Dates of Examination of principal parts—Cylinders 19-5-49 Covers 19-5-49 Pistons 19-5-49 Piston rods 19-5-49

Connecting rods 19-5-49 Crank and Flywheel shafts 19-5-49 Intermediate shafts

Crank shaft Material EN8 Tensile strength 40 tons
Elongation 22% Identification Marks 8/28 4-4-49 LLOYDS 2R 1948 6053 E.A.

Flywheel shaft, Material Identification Marks

Identification marks on Air Receivers

Is this machinery duplicate of a previous case If so, state name of vessel

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)

This engine has been built under Special Survey of tested materials and the workmanship is good. The engine has been surveyed during erection and under full load working conditions. Satisfactory governor trials have been carried out.

The engine is directly coupled to an electric generator made by Sunderland Forge, N° 41469 of capacity 35 K.W.

The set is supplied to the order of Messrs Sunderland Forge and intended for their Order N° 28600/1 dated 25-2-48.

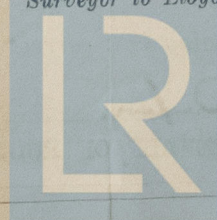
GILL, L.N.-T. (MADE AND PRINTED IN ENGLAND)
(The Surveyors are requested not to write on or below the space for Committee Minute.)

The amount of Fee ... £ 4 : 0 : 0 When applied for 16 June 1949
 Travelling Expenses (if any) £ When received

Committee's Minute

Assigned No Action

B. P. Zelden.
 Surveyor to Lloyd's Register of Shipping.



© 2021

Lloyd's Register
 Foundation