

RECEIVED

SUNDERLAND RPT. NO. 35304



UG 1949
Rpt. 4c.
D.O.

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS

No. 572
26 JUL 1949

Received at London Office

Date of writing Report 19... When handed in at Local Office 19... Port of NOTTINGHAM.

No. in Survey held at Lincoln Date, First Survey... Last Survey... 19...
Reg. Book. Number of Visits

on the ^{Single} ~~Twin~~ ~~Triple~~ ~~Quadruple~~ Screw vessel "FELIPES"
Tons { Gross 2992
Net 1544

Built at Sunderland. By whom built J. Crown. Yard No. 230 When built

Ordered by Sunderland Forge & Eng. Co. Ltd., Port belonging to 2594/12/470350.

Oil Engines made at Lincoln By whom made Ruston & Hornsby Ltd., Contract No. When made 1949

Generators made at Sunderland. By whom made Sunderland Forge & Eng. Co. Ltd., Contract No. When made

No. of Sets 1 Engine Brake Horse Power 40.5 M.N. as per Rule 10.125 Total Capacity of Generators 20 Kilowatts

Is Set intended for essential services

OIL ENGINES, &c.—Type of Engines 6VRHZ. Eng. No. 269999. 2 or 4 stroke cycle 4 Single or double acting SA

Maximum pressure in cylinders 350 lbs. Diameter of cylinders 4 1/2" Length of stroke 5 1/2" No. of cylinders 6 No. of cranks 6

Mean indicated pressure 113 lbs. Firing order in cylinders 1.2.4.6.5.3. Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 7"

Is there a bearing between each crank Yes WD² Moment of inertia of flywheel (16 m² or Kg.-cm.²) 1500 lb. ft. Revolutions per minute 675

Flywheel dia. 26" Weight 508 Means of ignition Compression Kind of fuel used Diesel Oil.

Crank Shaft, dia. of journals as per Rule 3.5/8" as fitted Crank pin dia. 3" Crank Webs Mid. length breadth 4.1/8" Thickness parallel to axis
Mid. length thickness 1.11/16" Thickness round eyehole

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

Are means provided to prevent racing of the engine when declutched Yes Means of lubrication Forced Kind of damper if fitted

Are the cylinders fitted with safety valves No Are the exhaust pipes and silencers 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, 207 galls./hour.

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 Open CW. CR. No. 41044.

Pressure of supply 110 volts. Full Load Current 182 Amperes. Direct or Alternating Current D.C.

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 Yes Generators, are they compounded as per Rule Yes 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

If the generators are under 100 kw. full load rating, have the makers supplied certificates of test No 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 17.5.40 Receivers Separate Tanks

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

SPARE GEAR Rule requirements.

The foregoing is a correct description,
Ruston & Hornsby Limited.

Manufacturer.

Shewes

Engineering Divn.



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Lloyd's Register
Foundation

004263-004274-0244

Dates of Survey while building { During progress of work in shops - - } 31.49. 16.5.49.
 { During erection on board vessel - - }
 Total No. of visits..... 2

Dates of Examination of principal parts—Cylinders..... 3.1.49. Covers..... 3.1.49. Pistons..... 3.1.49. Piston rods..... -
 Connecting rods..... 3.1.49. Crank and Flywheel shafts..... 3.1.49. Intermediate shafts.....

Crank shaft { Material..... Tensile strength.....
 { Elongation..... Identification Marks LL.2581. RD.9052. TDS.
 Flywheel shaft, Material..... Identification Marks.....

Identification marks on Air Receivers.....

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.)
 This machinery has been built under Special Survey in accordance with the approved plans and Rules of the Society, materials and workmanship being good.
 On completion, the generating set was tried under working conditions in the shops and the governor tested with satisfactory results.
 The set has been despatched to Sunderland for installation in the vessel.

10,846-1. (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 19
 Travelling Expenses (if any) £ : : { When received 19

FRI. 31 MAR 1950

Committee's Minute.....
 Assigned..... See F.E. Moly. rpt.

W. Scott
 Surveyor to Lloyd's Register of Shipping.
 Lloyd's Register Foundation