

RECEIVED



Rpt. 4c. 15 SEP 1949 IN D.O. REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS. No. 586

Received at London Office 9 SEP 1949

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 Twin Triple Quadruple Screw vessel M.V. 'CHRISTINE' Tons Gross Net

Built at Goole By whom built Goole S.B. & R. Co. Ltd., Yard No. 474 When built 1949

Owners Port belonging to 3145/12/470223/4.

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

Generators made at Norwich. By whom made Laurence Scott & Electromotors Ltd., Contract No. When made

No. of Sets 2 Engine Brake Horse Power 120 M.N. as per Rule 30 Total Capacity of Generators 150 Kilowatts.

Is Set intended for essential services per engine. per engine.

OIL ENGINES, &c.—Type of Engines 6VPHZ. Engines Nos. 268609, 268610. 2 or 4 stroke cycle 4 Single or double acting SA

Maximum pressure in cylinders 1000 lbs. Diameter of cylinders 5 3/8" Length of stroke 8" No. of cylinders 6 No. of cranks 6

Mean indicated pressure 109 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 6.25/32"

Is there a bearing between each crank Yes Moment of inertia of flywheel (16 m² or Kg.-cm.²) 1870 lb.-ft.² Revolutions per minute 1000

Flywheel dia. 2'2" Weight 630 lbs. Means of ignition Compression Kind of fuel used Diesel Oil

Crank Shaft, dia. of journals as per Rule Approved as fitted 4.3/16" Crank pin dia. 3 1/4" Crank Webs Mid. length breadth 5 3/8" Thickness parallel to axis

Flywheel Shaft, diameter as per Rule as fitted C/shaft Intermediate Shafts, diameter as per Rule as fitted 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, 557 gals./hour. Engine driven.

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 Encl. vert. D.P. CW. CR. Nos. 209980, 209981.

Pressure of supply 220 volts. Full Load Current 340 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 Yes and do the results comply with the requirements Yes

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

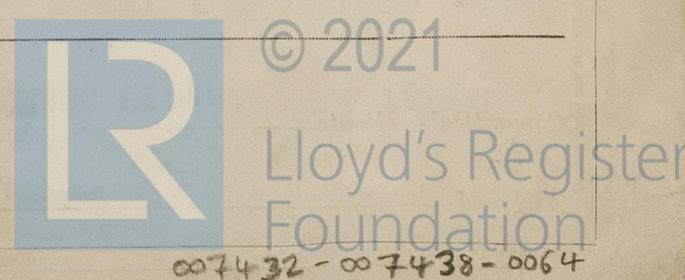
Details of driven machinery other than generator

PLANS.—Are approved plans forwarded herewith for Shafting 13.4.43. Receivers Separate Tanks

Have Torsional Vibration characteristics if applicable been approved Yes Duplicate of Goole No. 452. Armature shaft Drawing No.

SHAFTING Rule requirements. Approved 17/1/47 for 1000 lbs. see "LINGEST ROOM"

The foregoing is a correct description, Ruston & Hornsby Limited. Manufacturer. Reeves Engineering Divn.



007432 - 007438 - 0064

Dates of Survey while building { During progress of work in shops - - } 2.3.49, 7.3.49, 6.7.49.  
 { During erection on board vessel - - }  
 Total No. of visits 3

Dates of Examination of principal parts—Cylinders 2.3.49. 7.3.49. Covers 2.3.49. 7.3.49. Pistons 2.3.49. 7.3.49. Piston rods -

Connecting rods 2.3.49. 7.3.49. Crank and Flywheel shafts 2.3.49., 7.3.49. Intermediate shafts

Crank shaft { Material Tensile strength LL.3267. RE.266. TDS.  
 Elongation Identification Marks LL.3276. RE.278. TDS.

Flywheel shaft, Material Identification Marks

Identification marks on Air Receivers

Is this machinery duplicate of a previous case Yes If so, state name of vessel Goole S.B. & R. Yd.No.452.

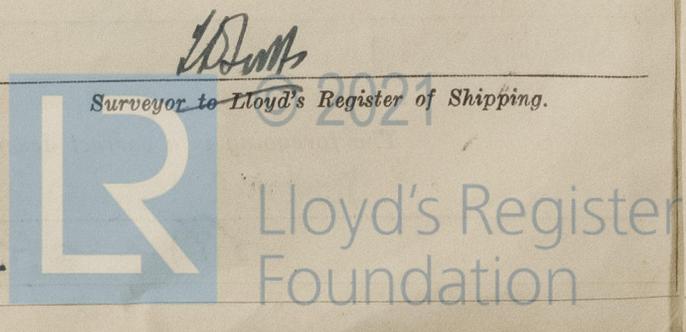
**GENERAL REMARKS** (State quality of workmanship, opinions as to class, &c.)

This machinery has been built under Special Survey in accordance with the Approved plans and the Rules of the Society, materials and workmanship being good.  
 On completion the generating sets were tried in the shops under working conditions and governing tested with satisfactory results.  
 The sets have been despatched to Goole for installation on board the vessel.

The amount of Fee ... £ 6 : 0 : 0 { When applied for 7/9/ 1949.  
 Travelling Expenses (if any) £ : : { When received 19

FRI. 13 OCT 1950

Committee's Minute  
 Assigned See minute on A.H.L.



5m.1.48.-T. (MADE AND PRINTED IN ENGLAND)  
 (The Surveyors are requested not to write on or below the space for Committee Minute.)