

Rpt. 4c.

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 308.

1 JUN 1948

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. on the Single } Screw vessel 'WARMIA' Number of Visits

Triple } Tons Gross

Quadruple } Net

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

Owners Port belonging to 17/450703

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

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

No. of Sets 1 Engine Brake Horse Power 30 M.N. as per Rule 7.5 Ltd., Total Capacity of Generators 12 Kilowatts.

Is Set intended for essential services.

OIL ENGINES, &c.—Type of Engines 3VRHZ Engine No. 238696 2 or 4 stroke cycle 4 Single or double acting SA

Maximum pressure in cylinders 800 lbs. Diameter of cylinders 4 1/2" Length of stroke 5 1/2" No. of cylinders 3 No. of cranks 3

Mean indicated pressure 112.5 Firing order in cylinders 1-3-2 Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 6.15/16"

Is there a bearing between each crank: Yes ~~Mean of width of flywheel (1000 or 10000)~~ 1164 lb. f. Revolutions per minute 1000

Flywheel dia. 26" Weight 420 lbs. Means of ignition Compression Kind of fuel used Diesel Oil.

Crank Shaft, dia. of journals as per Rule 3" Crank pin dia. 3" Crank Webs Mid. length breadth 3 1/2" Thickness parallel to axis -

as fitted 1.11/shrunk Mid. length thickness 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) -

as fitted C! shaft. as fitted -

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. one, engine driven Is the sea suction provided with an efficient strainer which can be cleared within the vessel

Lubricating Oil Pumps, No. and size one - 150 gals./ 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 Machine No. 151427.

Pressure of supply 220 volts Full Load Current 54.5 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 (Not attached)

Details of driven machinery other than generator Through clutch, Air Compressor, Hamworthy No. 70924.

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

Have Torsional Vibration characteristics if applicable been approved Not applicable. Armature shaft Drawing No.

SPARE GEAR To rule requirements.

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

Wans 2 VI 48

Engineering Divn.

Manufacturer.



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Lloyd's Register
Foundation

008831 - 008838 - 0156

Dates of Survey while building { During progress of work in shops - - 13.11.46. 24.3.48. During erection on board vessel - - - - - Total No. of visits..... 2

Dates of Examination of principal parts—Cylinders 13.11.46. Covers 13.11.46. Pistons 13.11.46. Piston rods. - Connecting rods 13.11.46. Crank and Flywheel shafts 13.11.46. Intermediate shafts.....

Crank shaft { Material..... Tensile strength 40/45 Tons/sq. inch. Elongation..... Identification Marks LL.874. TDS. BW.1187.

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 Standard.

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

This engine 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 set was tested under working conditions in the shops with satisfactory results.

The set has been forwarded to Goole for installation on board the vessel.

The amount of Fee ... £ 4 : 0 : 0 { When applied for 8-6- 19 48.

Travelling Expenses (if any) £ : : { When received..... 19.....

Committee's Minute.....

Assigned.....

