

RECEIVED

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REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 196

Port. 4c.

IN D.O.

Received at London Office

16 JUN 1947
28 OCT 1957

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...
Number of Visits...

on the Single }
Twin } Screw vessel... Tons { Gross...
Triple }
Quadruple }

built at Hull. By whom built Amos & Smith Ltd. Yard No... When built...
owners... Port belonging to...

Oil Engines made at Lincoln By whom made Ruston & Hornsby Ltd. Contract No. 450642.3 When made 1947
Generators made at Rigby. By whom made British Thomson Houston Co. Ltd. Contract No... When made...

No. of Sets 2 Engine Brake Horse Power 120 M.N. as per Rule 30 Total Capacity of Generators 160 Kilowatts.
per engine per engine
Set intended for essential services...

OIL ENGINES, &c.—Type of Engines 6VPHZ. Engine Nos. 246100 - 246101 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 lbs.-ft. Revolutions per minute 1000

Flywheel dia. 21-2" 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 1/2" Crank Webs Mid. length breadth 5 3/8" Thickness parallel to axis -
Mid. length thickness 1 3/8" shrunk Thickness round eye-hole -

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

Boiling 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 gallons/hour. engine driven.

Compressors, No. - No. of stages - Diameters - Stroke - Driven by -
Sucking 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 -
Are 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 -
Is it seamless, lap welded or riveted longitudinal joint - Material - Range of tensile strength - Working pressure by Rules -

Working Air Receivers, No. - Total cubic capacity - Internal diameter - thickness -
Is it seamless, lap welded or riveted longitudinal joint - Material - Range of tensile strength - Working pressure by Rules -

ELECTRIC GENERATORS:—Type - Machine No. 474362/1/19 - /38.
Voltage of supply 220 volts. Full Load Current 367 Amperes. Direct or Alternating Current D.C.

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

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

Are the generators driven by shafts of driven machinery other than generator Nil

SHAFTS:—Are approved plans forwarded herewith for Shafting Standard Approved. Receivers - Separate Tanks -
(If not, state date of approval)

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

RE GEAR As per Rule. *Key*

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

Moans 5 VI 47 Manufacturer.

Oil & Gas Engine Dept.



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Lloyd's Register
Foundation

003046-003055-0262

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

Dates of Examination of principal parts—Cylinders 12.7.46. Covers 12.7.46. Pistons 12.7.46. Piston rods.....

Connecting rods 12.7.46. Crank and Flywheel shafts 12.7.46. Intermediate shafts.....

Crank shaft { Material..... Tensile strength LL 413. RD 4638.
 { Elongation..... Identification Marks LL 415. RD 4639.

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 Type.

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 Regulations of the Society, materials and workmanship being good.

On completion the set was tried in the Shops under working conditions and found to be satisfactory.

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

Losses approved in Decree of 9-4-46 for a duplicate case

Efficiency fitted on board -

110.8.46.-I. (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 : 10 : 0 { When applied for 13.6. 1947.
 per engine. {
 Travelling Expenses (if any) £ : : { When received 19

Committee's Minute.....
 Assigned See F.B. mchey spot.

FRI. 28 NOV 1947

