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13 DEC 1949

Rpt. 4c.
IN D.O.

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 678

Received at London Office
NOTTINGHAM. 6 DEC 1949

Date of writing Report 25.11.49. When handed in at Local Office 19. Port of

No. in Survey held at 15368 Reg. Book. Date, First Survey 8.9.49. Last Survey 27.10.49. Number of Visits

on the Single Screw vessel S.S. "KINGSTON DIAMOND" Tons Gross Net

Built at Hull. By whom built Messrs. Broady & Co. Ltd. Yard No. When built
Owners Messrs. The Kingston S. T. Co. Ltd. Port belonging to

Oil Engines made at Derby By whom made Pelapone Engines Ltd. Contract No. 9804 When made 1949

Generators made at Dursley By whom made Mawdsley Co. Ltd. Contract No. When made 1949

No. of Sets One Engine Brake Horse Power 12 M.N. as per Rule Total Capacity of Generators 7.6 Kilowatts.

Is Set intended for essential services. Yes

OIL ENGINES, &c.—Type of Engines 4 S.C.S.A. Engine 519804 2 or 4 stroke cycle 4 Single or double acting S.A.

Maximum pressure in cylinders 850 lbs. Diameter of cylinders 4.7/16" Length of stroke 6" No. of cylinders One No. of cranks One

Mean indicated pressure 85.5 Firing order in cylinders Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 5 1/2"

Is there a bearing between each crank Yes Moment of inertia of flywheel (16 m² or Kg.-cm.²) 5.6 lbs.ft. Sec.² Revolutions per minute 1200

Flywheel dia. 22" Weight 559 lbs. Means of ignition Compression Kind of fuel used Diesel Oil

Crank Shaft, dia. of journals as per Rule 3 1/8" Crank pin dia. 2.7/8" Crank Webs Mid. length breadth 4 5/8" Thickness parallel to axis
as fitted 3 1/8" Mid. length thickness 1 1/2" shrunk 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 Means of lubrication Kind of damper if fitted

Are the cylinders fitted with safety valves 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

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 Compound Generator No. 80S5663

Pressure of supply 110 volts Full Load Current 63.5 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

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

If the generators are 100 kw. or over have they been built and tested under survey Not with stand

Details of driven machinery other than generator

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

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

SPARE GEAR To Rule requirements

The foregoing is a correct description,
FOR AND ON BEHALF OF
PELAPONE ENGINES LTD.
R.G. Bambridge

Manufacturer.



003742-003749-0248

8.9.49., 6.10.49., 27.10.49.

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

Dates of Examination of principal parts: Cylinders 8.9.49., Covers 8.9.49., Pistons 8.9.49., Piston rods 8.9.49., Connecting rods 8.9.49., Crank and Flywheel shafts, Intermediate shafts

Crank shaft: Material Meehanite casting, Tensile strength 27/30 tons per sq.in., Elongation London Cert.No.D.21069, Identification Marks 6101 A.C.W. 6.10.49.

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, etc.)

This engine has been built under Special Survey, in accordance with the approved plans and Regulations of the Society; the materials and workmanship being good.

On completion the engine was run in the shops under working conditions and found satisfactory.

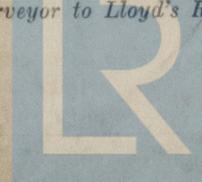
The engine has been packed and despatched to Hull.

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

The amount of Fee ... £ 4 : 0 : 0 When applied for 5.12. 1949, Travelling Expenses (if any) £ : : When received 19

H Thorburn Surveyor to Lloyd's Register of Shipping.

Committee's Minute WED 8 FEB 1950 Assigned See Hull. 56209



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