

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS

MAR 28 1938

JUL -6 1938

Date of writing Report 24.3.38 When handed in at Local Office 25.3.38 Port of Grimsby
No. in Survey held at Lincoln Date, First Survey 22.4.1937 Last Survey 14.3.1938
Reg. Book. Number of Visits 12
on the Single on the Twin Triple Quadruple Screw vessel MV BAPHNELLA Tons Gross Net
Built at Newcastle By whom built Hawthorn Leslie & Co. Ltd Yard No. 610 When built 1936
Owners Port belonging to
Oil Engines made at Lincoln By whom made Ruston & Hornsby, Ltd Contract No. 185255 When made 1938
Generators made at By whom made Contract No. When made
No. of Sets One Engine Brake Horse Power 60 Nom. Horse Power as per Rule 18.6 Total Capacity of Generators Kilowatts.

OIL ENGINES, &c. Type of Engines 3VCRZ Vertical Solid Injection 2 or 4 stroke cycle 4 Single or double acting Single
Maximum pressure in cylinders 700 lbs. Diameter of cylinders 8" Length of stroke 10 3/4" No. of cylinders 3 No. of cranks 3
Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 9 1/8" Is there a bearing between each crank Yes
Revolutions per minute 450 Flywheel dia. 3'-4" Weight 19 tons Means of ignition Compression Kind of fuel used Heavy Oil
Crank Shaft, dia. of journals as per Rule Approved as fitted 6" Crank pin dia. 4 3/4" Crank Webs Mid. length breadth 8" Thickness parallel to axis
as fitted 6" Mid. length thickness 2 1/2" shrunk Thickness around eyehole
Flywheel Shaft, diameter as per Rule Approved as fitted 6" Intermediate Shafts, diameter as per Rule Thickness of cylinder liners 3/4"
Is a governor or other arrangement fitted to prevent racing of the engine when declutched Yes Means of lubrication Forced
Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled or lagged with non-conducting material Water cooled.
Cooling Water Pumps, No. One Is the sea suction provided with an efficient strainer which can be cleared within the vessel
Lubricating Oil Pumps, No. and size One, geared.
Air Compressors, No. 644 No. of stages Two Diameters 184 - 206 mm Stroke 160 mm Driven by Engine
Scavenging Air Pumps, No. Diameter Stroke Driven by

AIR RECEIVERS: -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
Pressure of supply volts. Load Amperes. Direct or Alternating Current
If alternating current system, state frequency of periods per second
Has the Automatic Governor been tested and found efficient when the whole load is suddenly thrown on or off
Generators, do they comply with the requirements regarding rating are they compound wound
are they over compounded 5 per cent. if not compound wound state distance between each generator
is an adjustable regulating resistance fitted in series with each shunt field Are all terminals accessible, clearly marked, and furnished with sockets
are they so spaced or shielded that they cannot be accidentally earthed, short circuited, or touched Are the lubricating arrangements of the generators as per Rule

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

As per Rule requirements.

B.S.B. 7-7-38

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

Oil & Gas Engines Dept



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002659-002666-0166

Dates of Survey while building
 During progress of work in shops - - 1937 Apr 22 May 6. 20 Jul 19. 22 Aug 12 Sep 20 1938 Jan 6. 24 Feb 24. 28 Mar 14
 During erection on board vessel - - -
 Total No. of visits 12

Dates of Examination of principal parts—Cylinders 28-2-38 Covers 28-2-38 Pistons 28-2-38 Piston rods ✓

Connecting rods 14-12-37 Crank and Flywheel shaft 6-1-38 Intermediate shaft ✓

Crank and Flywheel shafts, Material Steel Identification Mark LLOYD'S - 3274 - 6-1-38 A.S.

Intermediate shafts, Material ✓ Identification Marks ✓

Is this machinery duplicate of a previous case *Yes*. If so, state name of vessel *Imv. Rpt. 20393.*

General Remarks (State quality of workmanship, opinions as to class, &c.)

This engine and compressor have been built under special survey in accordance with the Rules and approved plans.

The workmanship and materials are good.

Running tests have been carried out at the Makers works with satisfactory results.

The set has been despatched to Newcastle-on-Tyne to the order of Messrs Hawthorn Leslie & Co. Ltd for fitting on board the vessel.

This engine has been efficiently installed on MV Daphnells examined under working conditions & found satisfactory.

L. Peskett

Im. 9. 28 - Transfer. (The Surveyors are requested not to write on or below the space for Committee Minute.)

Request form attached Imv Rpt 20393
 of 2584/P. IV. 8432
 - 37/10. 702

The amount of Fee ...
 Travelling Expenses (if any) £

To be charged in Annual account
 When applied for, 19...
 When received, 19...
W. H. P. for J. D. H. Collinson & Self.
 Surveyor to Lloyd's Register of Shipping.

FRI 8 JUL 1938

See Nwa & Co 96399

Committee's Minute
 Assigned



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