

# REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS

COMPRESSOR

No. 20914

24 1939

Date of writing Report 22.3.39 When handed in at Local Office 22.3.39 Port of Grimsby  
 No. in Survey held at Lincoln Date, First Survey 16.6.38 Last Survey 9.3.1939  
 Reg. Book. Number of Visits 7

on the Single Twin Triple Quadruple Screw vessel M.V. "CEDARDALE"  
 Built at Greenock By whom built J. I. Lincaid & Co., Ltd. Yard No. 12/ When built  
 Owners Port belonging to

Oil Engines made at Lincoln By whom made Ruston & Hornsby, Ltd. ENGINE Contract No. 190492 When made 1939  
 COMPRESSOR Generators made at Peterborough By whom made Peter Brotherhood, Ltd. COMPRESSOR Contract No. 64801B When made 1939  
 No. of Sets One Engine Brake Horse Power 60 Nom. Horse Power as per Rule 17 Total Capacity of Generators Kilowatts.

OIL ENGINES, &c.—Type of Engines 3 VCRZ-Vertical Solid Injection 2 or 4 stroke cycle 4 Single or double acting Single  
 Maximum pressure in cylinders 400 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 Cwts. Means of ignition Compression Kind of fuel used Heavy oil  
 Crank Shaft, dia. of journals as per Rule Approved 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 eye hole  
 Flywheel Shaft, diameter as per Rule Approved 6" Intermediate Shafts, diameter as per Rule Thickness of cylinder liners 3/4"  
 as fitted 6" 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. One No. of stages Two Diameters Stroke Driven by Engine  
 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  
 Pressure of supply volts. Full Load Current Amperes. Direct or Alternating Current  
 If alternating current system, state the periodicity Has the Automatic Governor been tested and found efficient when the whole load is suddenly thrown on and off  
 Generators, are they compounded as per rule 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  
 If the generators are under 100 kw. full load rating, have the Makers supplied certificates of test and do the results comply with the requirements  
 If the generators are 100 kw. or over have they been built and tested under survey

PLANS. Are approved plans forwarded herewith for Shafting 11-11-32 Receivers. Separate Tanks 25-2-38  
 (If not, state date of approval)

SPARE GEAR

As per Rule requirements.

Ruston & Hornsby Limited,  
 The foregoing is a correct description,  
 E. Wignall  
 Oil & Gas Engine Dept.

Manufacturer.



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Dates of Survey while building { During progress of work in shops - - 1938 June 23 1939 Jan 30 Feb 13. 27 Mar 2. 9.  
During erection on board vessel - - -  
Total No. of visits 7

Dates of Examination of principal parts—Cylinders 2-3-39 Covers 2-3-39 Pistons 2-3-39 Piston rods  
Connecting rods 16-6-38 Crank and Flywheel shafts 30-1-39 Intermediate shafts  
Crank and Flywheel shafts, Material Steel Identification Marks LLOYD'S 3436- 30-1-39 AS  
Intermediate shafts, Material Housing Identification Marks LLOYD'S 3438- 30-1-39 AS  
Identification marks on Air Receivers

Is this machinery duplicate of a previous case Yes If so, state name of vessel - Gms Rpt No 20892

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 Messrs J. L. Kincaid & Co. Ltd. Greenock for fitting on board the vessel.

This compressor set has been properly installed in the vessel.  
J. Boyle Greenock  
25-5-39.

Request for attaches Gms Rpt 20790  
9/2035/17/P/13/12096-38/13/10

The amount of Fee ...	£ 5 : -	When applied for, 22.3.1939
Travelling Expenses (if any) £	:	When received, 6.5.1939.

*R. Andrew*

Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 30 MAY 1939

Assigned SEE ACCOMPANYING MACHINERY REPORT.



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