

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

Bel. 12500

No. 20978

JUN 13 1939

Date of writing Report 9th June 1939 When handed in at Local Office 9th June 1939 Port of Grimsby
 No. in Survey held at Lincoln Date, First Survey 27.1.38 Last Survey 1.6.1939
 Reg. Book. 36311 on the Single Twin Triple Quadruple Screw vessel " WAHOTIRA " Number of Visits 24

Port belonging to Belmont By whom built Harland & Wolff, Ltd Yard No. 1019 When built 1938
 Owners Belmont Oil Engines made at Lincoln By whom made Ruston & Hornsby, Ltd Engine Contract No. 197823 When made 1939
 Generators made at Horwich By whom made Laurence, Scott & Electromotors, Ltd Generator Contract No. 78594 When made 1939
 No. of Sets One Engine Brake Horse Power 40 Nom. Horse Power as per Rule 11.4 Total Capacity of Generators 25 Kilowatts.

IL ENGINES, &c.—Type of Engines 3 VQZ-Vertical Solid Injection 2 or 4 stroke cycle 4 Single or double acting Single
 Maximum pressure in cylinders 800 lbs. Diameter of cylinders 5 3/8" Length of stroke 8" No. of cylinders 3 No. of cranks 3
 Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 6 1/4" Is there a bearing between each crank Yes
 Revolutions per minute 475 Flywheel dia. 32" Weight 700 lbs. Means of ignition Compression Kind of fuel used Heavy oil
 Crank Shaft, dia. of journals as per Rule 3 5/8" Crank pin dia. 3 1/4" Crank Webs as per Rule 5 3/8" Thickness parallel to axis as fitted 1 3/4" Thickness around eye-hole as fitted 1 1/2"
 Flywheel Shaft, diameter as per Rule 3 5/8" Intermediate Shafts, diameter as per Rule 3 5/8" Thickness of cylinder liners 1 1/2"
 Is a governor or other arrangement fitted to prevent racing of the engine when declutched Yes Means of lubrication Lined
 Are the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled or lagged with non-conducting material Yes
 Cooling Water Pumps, No. One Is the sea suction provided with an efficient strainer which can be cleared within the vessel Yes
 Lubricating Oil Pumps, No. and size One, geared.
 Air Compressors, No. Yes No. of stages Yes Diameters Yes Stroke Yes Driven by Yes
 scavenging Air Pumps, No. Yes Diameter Yes Stroke Yes Driven by Yes

R RECEIVERS:—Have they been made under Survey Yes State No. of Report or Certificate 20978
 Is each receiver, which can be isolated, fitted with a safety valve as per Rule Yes
 Can the internal surfaces of the receivers be examined Yes What means are provided for cleaning their inner surfaces Inspection hole
 Is there a drain arrangement fitted at the lowest part of each receiver Yes
 High Pressure Air Receivers, No. Yes Cubic capacity of each Yes Internal diameter Yes thickness Yes
 Seamless, lap welded or riveted longitudinal joint Yes Material Yes Range of tensile strength Yes Working pressure by Rules Yes
 Starting Air Receivers, No. One Total cubic capacity 11.2 Cub. ft. Internal diameter 2'-0 1/8" thickness 5/16"
 Seamless, lap welded or riveted longitudinal joint Seamless Material Steel Range of tensile strength 26-30 Tons. Working pressure by Rules Approved.

ELECTRIC GENERATORS:—Type Screen Protected
 Pressure of supply 220 volts. Full Load Current 114 Amperes. Direct or Alternating Current Direct
 Is an alternating current system, state the periodicity Yes Has the Automatic Governor been tested and found efficient when the whole load is suddenly thrown on and off Yes
 Are the generators, are they compounded as per rule Yes Is an adjustable regulating resistance fitted in series with each Yes
 Is the 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
 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 Yes

ANS. Are approved plans forwarded herewith for Shafting 7-7-32 Receivers 5-5-38 Separate Tanks 25-2-38
 (If not, state date of approval)

ARE GEAR
As per Rule requirements

The foregoing is a correct description,

Ruston & Hornsby Limited,

H. C. W. Kimber

Manufacturer.

Oil & Gas Engine Dept.



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Lloyd's Register Foundation

W1139-0153

Dates of Survey while building { During progress of work in shops - - } 1938 Jan 27 Feb 3.21 May 9.10 Jun 2.3 Jul 5.11 Oct 10.20 Nov 28 Dec 5 1939 Feb 16 Mar 7. Apr 5.12.24 May 1.15.18.22.23
 { During erection on board vessel - - - }
 Total No. of visits 24.

Dates of Examination of principal parts—Cylinders 23-5-39 Covers 23-5-39 Pistons 23-5-39 Piston rods ✓

Connecting rods 7-3-39 Crank and Flywheel shafts 5-12-38, 23-5-39 Intermediate shafts ✓

Crank and Flywheel shafts, Material Steel Identification Marks LLOYD'S 3426-5-12-38 AS.

Intermediate shafts, Material Housing Identification Marks LLOYD'S 3480-24-4-39 AS.

Identification marks on Air Receivers E 1539
 Lloyd's Test
 600 lbs.
 WP 300 lbs.
 1-6-39 AS.

Is this machinery duplicate of a previous case Yes If so, state name of vessel Guna Rps no. 19187

General Remarks (State quality of workmanship, opinions as to class, &c.)
 This engine has 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 Harland & Wolff, Ltd. Belfast for fitting on board the vessel.
 Ship engine & generator have been efficiently installed and tested under working conditions with satisfactory results.

9/3862/7/38/12/674-P/12/13146

The amount of Fee ... £ 4: 19: 9.6 39
 (304³ already charged) 1/-
 Travelling Expenses (if any) £ unity : 1/12/39

Surveyor to Lloyd's Register of Shipping.

TUE 12 DEC 1939

Committee's Minute
 Assigned

See Rel. 12500