

COMPRESSOR

REPORT ON OIL ENGINE ~~ELECTRIC GENERATOR~~ SETS.

No. 21124

pt. 4c.

Received at London Office

16 NOV 1939

Date of writing Report 15.11.39 When handed in at Local Office 15.11.39 Port of

Grimsby

No. in Survey held at Reg. Book.

Lincoln

Date, First Survey 25.8.38

Last Survey 9.11.1939

Number of Visits 9

Single on the Twin Triple Quadruple Screw vessel

Tu. Se. Ind. Lanchester

Tons Gross Net

Built at Greenock By whom built Greenock Dockyard Co. Ltd Yard No. 437 When built 1940

Owners Port belonging to

Oil Engines made at Lincoln By whom made Ruston & Hornsby, Ltd Contract No. 195324 When made 1939.

Generators made at Poole By whom made Hamworthy Engineering Co. Ltd Contract No. 43432 When made 1939

No. of Sets / Engine Brake Horse Power 5 Nom. Horse Power as per Rule 1.4 Total Capacity of Generators Kilowatts.

OIL ENGINES, &c.—Type of Engines VTOZ—Vertical Solid Injection 2 or 4 stroke cycle 4 Single or double acting Single

Maximum pressure in cylinders 850 Diameter of cylinders 4" Length of stroke 4" No. of cylinders 1 No. of cranks 1

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 4 5/8" Is there a bearing between each crank Yes

Revolutions per minute 1000 Flywheel dia. 19 1/2" Weight 160 lbs. Means of ignition Compression Kind of fuel used Heavy oil

Crank Shaft, dia. of journals as per Rule Approved 2 1/8" Crank pin dia. 2 1/2" Crank Webs Mid. length breadth 3 3/8" Thickness parallel to axis shrunk Mid. length thickness 1 1/4" Thickness around eye hole

Flywheel Shaft, diameter as per Rule Approved 2 1/8" Intermediate Shafts, diameter as per Rule Thickness of cylinder liners 1 1/4"

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 No (hand starting) Are the exhaust pipes and silencers water cooled or lagged with non-conducting material

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 Single Diameters 2 1/4" Stroke 3" Driven by Engine

Scavenging Air Pumps, No. Diameter Stroke Driven by

AIR RECEIVERS:—Have they been made under Survey Yes State No. of Report or Certificate C 3438.

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. 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. One Total cubic capacity 3.25 Cub. ft Internal diameter 1'-3" 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

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 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 17-9-39 Receivers 5-5-38 Separate Tanks

SPARE GEAR

As per Rule requirements.

17/11/39

The foregoing is a correct description, Ruston & Hornsby Limited, H. Geo. Kimber Manufacturer, Oil & Gas Engine Dept.

© 2020 Lloyd's Register Foundation

Dates of Survey while building { During progress of work in shops - - } 1938 Aug 25-29 1939 Mar 21. 31 Apr 27 May 8-15 Oct 16 Nov 9
 { During erection on board vessel - - - }
 Total No. of visits 9

Dates of Examination of principal parts—Cylinders 8-5-39 Covers 8-5-39 Pistons 8-5-39 Piston rods ✓
 Connecting rods 27-4-39 - 8-5-39 Crank and Flywheel shafts 8-5-39 Intermediate shafts ✓
 Crank and Flywheel shafts, Material Steel Identification Marks LLOYDS 3487-8-5-39 AS
 Intermediate shafts, Material ✓ Identification Marks ✓

Identification marks on Air Receivers 58885
 Lloyds Test
 600 lbs.
 W.P. 300 lbs.
 9-11-39 AS.

Is this machinery duplicate of a previous case Yes If so, state name of vessel Gns. Rpt. No. 20963.

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, Secretary's letters and approved plans.

The workmanship and materials are good.

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

The set is being shipped to Messrs Greenock Dockyard Co. Ltd. Greenock, for fitting on board the vessel.

This set has been successfully installed on board the vessel, tried out under full working conditions, with satisfactory results, & is eligible in my opinion to be fitted in a vessel classed in the Society's Register Book.

Charles A. Hunter

Greenock
 12/4/40

07/39/11/70 - 11/11712.
 Request from attached Gns. Rpt. 20963

The amount of Fee	£ 2 : 19 8	When applied for,	15. 11. 39
3 less 4 for C/R Survey (10s) already dep.		When received,	8 th FEB. 1940
Travelling Expenses (if any) £			

A. A. A. A.
 Surveyor to Lloyd's Register of Shipping.

Committee's Minute GLASGOW 16 APR 1940

Assigned SEE ACCOMPANYING MACHINERY REPORT.



© 2020

Lloyd's Register Foundation