

COMPRESSOR

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 20872

Feb -4 1939

Rpt. 4c.

Date of writing Report 3. 2. 1939 When handed in at Local Office 3. 2. 1939 Port of *Grimsby*  
 No. in Survey held at *Lincoln* Date, First Survey 2. 6. 38 Last Survey 19. 1. 1939  
 Reg. Book. *87788* on the *Single* *Twin* *Triple* *Quadruple* Screw vessel *Diloma*  
 Built at *Birkenhead* By whom built *Cammell, Laird & Co., Ltd* Yard No. *1037* When built *1939*  
 Owners *Anglo Saxon Petroleum Co.* Port belonging to *London*  
 Oil Engines made at *Lincoln* By whom made *Ruston & Hornsby, Ltd* ENGINE Contract No. *191613* When made *1939*  
 COMPRESSOR made at *Schiedam* By whom made *W. A. Bosch's Machine- en Juurstofffabriek* COMPRESSOR Contract No. *728* When made *1938*  
 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 Cwt.* Means of ignition *Compression* Kind of fuel used *Heavy oil.*  
 Crank Shaft, dia. of journals *6"* as per Rule *Approved* Crank pin dia. *4 3/4"* Crank Webs *8"* Mid. length breadth *8"* Thickness parallel to axis *shrunk*  
 as fitted *6"* Mid. length thickness *2 1/2"* Thickness around eyehole *shrunk*  
 Flywheel Shaft, diameter *6"* as per Rule *Approved* 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 *Lanced*  
 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 *18 1/4 - 20 1/2 in* Stroke *160 in* 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 *✓*  
 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 unit 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 *✓*  
 Do the generators are under 100 kw. full load rating, have the Makers supplied certificates of test *✓* and do the results comply with the requirements *✓*  
 Do the generators are 100 kw. or over have they been built and tested under survey *✓*

ANS. Are approved plans forwarded herewith for Shafting *11-11-32* Receivers *✓* 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,*  
*Oil & Gas Engine Dept.*

Manufacturer.



© 2021

Lloyd's Register Foundation



Dates of Survey while building { During progress of work in shops - - 1938 Jun 2.23. Jul 7. Dec 8. 19.22. 1939 Jan 9.13.19  
During erection on board vessel - - -  
Total No. of visits 9.

Dates of Examination of principal parts—Cylinders 13-1-39 Covers 13-1-39 Pistons 13-1-39 Piston rods ✓  
Connecting rods 2-6-38 Crank and Flywheel shafts 19-12-38 Intermediate shafts ✓  
Crank and Flywheel shafts, Material Steel Identification Marks LLOYD'S 3438-19-12-38 AS.  
Intermediate shafts, Material Housing Identification Marks LLOYD'S 3437-19-12-38 AS.  
Identification marks on Air Receivers

Is this machinery duplicate of a previous case Yes If so, state name of vessel Gun Rpt no 20790.

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. Cammell, Laird & Co., Ltd., Birkenhead, for fitting on board the vessel.

This Machinery has been satisfactorily fitted on board, and run under working conditions + found satisfactory.

J. S. Milton.

Request form attached Gun Rpt 20790  
7/2035/T/P/13/12095-38/13/32

The amount of Fee ... £ 5 - - : When applied for, 3/2/39

Travelling Expenses (if any) £ : : When received, 13/4/39

Committee's Minute

Assigned

See Minute on H. Machinery

*Charles*  
Surveyor to Lloyd's Register of Shipping.



© 2021

Lloyd's Register Foundation