

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 50332

16 APR 1930

Received at London Office

Date of writing Report *11th April 1930* When handed in at Local Office *11th April 1930* Port of *GLASGOW*
 No. in Survey held at *Glasgow* Date, First Survey *19. 11. 29* Last Survey *7th April 1930*
 Reg. Book. *40783* on the *Single* Screw vessel *"INNISFALLEN"* Number of Visits *22*

Built at *Belfast* By whom built *Harlands Wolff Ltd* Yard No. *870* When built *1930*
 Owners *City of Glasgow Steam Packet Co. Ltd.* Port belonging to *CRK*
 Oil Engines made at *Glasgow* By whom made *Harlands Wolff Ltd* Contract No. *870* When made *1930*
 Generators made at *Belfast* By whom made *do.* Contract No. *870* When made *1930*
 No. of Sets *Two* Engine Brake Horse Power *165 EACH* Nom. Horse Power as per Rule *94 (max)* Total Capacity of Generators *220* Kilowatts.

IL ENGINES, &c. Type of Engines *Diesel Vertical Reciprocating* or 4 stroke cycle *4* Single or double acting *Single*
 Maximum pressure in cylinders *600* Diameter of cylinders *230 mm.* Length of stroke *380 mm.* No. of cylinders *6 each* No. of cranks *6 each*
 Span of bearings, adjacent to the Crank, measured from inner edge to inner edge *302 mm.* Is there a bearing between each crank *yes*
 Revolutions per minute *300* Flywheel dia. *1225 mm.* Weight *1.08 Tons* Means of ignition *Compression* Kind of fuel used *Diesel*
 Crank Shaft, dia. of journals *as per Rule 132 mm.* Crank pin dia. *140 mm.* Crank Webs *Mid. length breadth 335 mm.* Thickness parallel to axis *Built solid.*
 Flywheel Shaft, diameter *as per Rule 132 mm.* Intermediate Shafts, diameter *as fitted 140 mm.* Thickness around eyehole *solid.*
 Is there a governor or other arrangement fitted to prevent racing of the engine when declutched *yes* Means of lubrication *Forced gravity.*
 Are the cylinders fitted with safety valves *yes* Are the exhaust pipes and silencers water cooled or lagged with non-conducting material *Lagged*
 Cooling Water Pumps, No. *Ship's system* Is the sea suction provided with an efficient strainer which can be cleared within the vessel
 Lubricating Oil Pumps, No. and size *1 each engine.*
 Air Compressors, No. No. of stages Diameters Stroke Driven by
 SAVING Air Pumps, No. Diameter Stroke Driven by

R RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule *yes.*
 Are the internal surfaces of the receivers be examined *yes* What means are provided for cleaning their inner surfaces *Loose ends.*
 Is there a drain arrangement fitted at the lowest part of each receiver *yes.*
 High Pressure Air Receivers, No. *None* 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 *150 Litres* Internal diameter *295 mm.* thickness *16 mm.*
 Seamless, lap welded or riveted longitudinal joint *Seamless* Material *Steel* Range of tensile strength *28-32 tons* Working pressure by Rules *1100 lbs./sq. in.*

ELECTRIC GENERATORS:—Type *Open.*
 Pressure of supply *220* volts. Load *500 (each)* Amperes. Direct or Alternating Current *Direct.*
 Is an alternating current system, state frequency of periods per second
 Is the Automatic Governor been tested and found efficient when the whole load is suddenly thrown on or off *yes.*
 Do the generators, do they comply with the requirements regarding rating *yes* are they compound wound *yes*
 Are they over compound *yes* 5 per cent. if not compound wound state distance between each generator
 Is an adjustable regulating resistance fitted in series with each shunt 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*
 Are approved plans forwarded herewith for Shafting *12-10-29* Receivers Separate Tanks
 Are there GEAR *As per attached list — in excess of Rule requirements.*

The foregoing is a correct description,

For HARLAND & WOLFF, LTD.

J. C. Green,

Manufacturer.

MANAGER FINNISTOWN DOCK

per A.



© 2020

Lloyd's Register Foundation

Dates of Survey while building { During progress of work in shops - 1929 Nov 19 Dec 10 18 (1930) Jan 9 16 20 Feb 6 20 25 Mar 4 10 11 12 13 14 19 20 25
During erection on board vessel - Apr 2 4 7
Total No. of visits 22

Dates of Examination of principal parts—Cylinders 20-2-30 Covers 20-2-30 Pistons 25-2-30 Piston rods None

Connecting rods 25-2-30 Crank and Flywheel shafts 9-1-30 & 20-1-20 Intermediate shaft None

Crank and Flywheel shaft, Material Steel Identification Mark 2458 2605 308 Intermediate shafts, Material Identification Marks

Is this machinery duplicate of a previous case No If so, state name of vessel

General Remarks (State quality of workmanship, opinions as to class, &c.) These two six-cylinder auxiliary Diesel Engines have been built under special survey in accordance with this Society's Rules. The materials & workmanship are good. They have been tried in the Works under full-power load with satisfactory results. The Engines & their generators have been forwarded to Belfast to be fitted in the vessel.

These auxiliary engines have been fitted in the auxiliary motor room of the vessel and apparently fastened on their seats. They have been tried out under working conditions with satisfactory results.

R. Lee Ames
Belfast.

A. G.
11/4/30

The amount of Fee ... £ 9 : 8/- : 14 APR 1930

Travelling Expenses (if any) £ : : 15 May 30

Committee's Minute GLASGOW 15 APR 1930

Assigned Deferred.

J. D. Boyle
Surveyor to Lloyd's Register of Shipping.