

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 138

Date of writing Report 1st Aug. 1936 When handed in at Local Office 1st Aug. 1936 Port of Wintertun
 No. in Survey held at Wintertun Date, First Survey 18th Dec., 35 Last Survey 13th July, 1936
 Reg. Book. Wintertun Number of Visits 19419, 19425

on the Single Twin Triple Quadruple Screw vessel "BRISBANE STAR" Tons { Gross 19431 Net 19425
 Built at Birkenhead By whom built Messrs Bammell Laird & Co Yard No. 1016 When built 19419, 19425
 Owners Messrs The Blue Star Line Ltd. Port belonging to London
 Oil Engines made at Wintertun By whom made Messrs Sulzer Bros Contract No. 19431 When made 1936
 Generators made at Wintertun By whom made Messrs Sulzer Bros Contract No. 19431 When made 1936
 No. of Sets 3 Engine Brake Horse Power 500 each Nom. Horse Power as per Rule 228 Total Capacity of Generators 684 Kilowatts.

OIL ENGINES, &c.—Type of Engines Sulzer Solid Injection Engines 2 or 4 stroke cycle 4 Single or double acting Single
 Maximum pressure in cylinders 780 lb sq in Diameter of cylinders 290 mm Length of stroke 440 mm No. of cylinders 18 (3 engs) No. of cranks 18 (3 engs)
 Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 322 mm Is there a bearing between each crank yes
 Revolutions per minute 375 Flywheel dia. 1800 mm Weight 5500 kg Means of ignition Compression Kind of fuel used Heavy fuel oil
 Crank Shaft, dia. of journals 179 mm as per Rule 179 mm Crank pin dia. 180 mm Crank Webs 276 mm Mid. length breadth 276 mm Thickness parallel to axis 93 mm Mid. length thickness 93 mm Thickness around eyehole 27 mm
 Flywheel Shaft, diameter 265 mm as per Rule 265 mm Intermediate Shafts, diameter 265 mm as per Rule 265 mm Thickness of cylinder liners 27 mm
 Is a governor or other arrangement fitted to prevent racing of the engine when disengaged 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 yes
 Cooling Water Pumps, No. 1 Reserve for cooling fuel yes Is the sea suction provided with an efficient strainer which can be cleared within the vessel yes
 Lubricating Oil Pumps, No. and size 1 Gear wheel pump each engine. Capacity 1.1 litres per second.

Air Compressors, No. 1 No. of stages 1 Diameters 290/300 mm Stroke 180 mm Driven by crankshaft
 Scavenging Air Pumps, No. 1 Tandem D.A. for each engine Diameter 290/300 mm Stroke 180 mm Driven by crankshaft

AIR RECEIVERS:—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 hole 125 mm dia.
 Is there a drain arrangement fitted at the lowest part of each receiver yes
 High Pressure Air Receivers, No. 2 Cubic capacity of each 500 litres Internal diameter 374 mm thickness 8 mm
 Seamless, lap welded or riveted longitudinal joint seamless Material S.M. steel Range of tensile strength 55-61.3 kg/mm² Working pressure by Rules 654 lb sq in
 Starting Air Receivers, No. 2 Total cubic capacity 500 litres Internal diameter 374 mm thickness 8 mm
 Seamless, lap welded or riveted longitudinal joint seamless Material S.M. steel Range of tensile strength 55-61.3 kg/mm² Working pressure by Rules 654 lb sq in

ELECTRIC GENERATORS:—Type

Pressure of supply volts Load Amperes Direct or Alternating Current Direct

If alternating current system, state frequency of periods per second 50

Has the Automatic Governor been tested and found efficient when the whole load is suddenly thrown on or off yes

Generators, do they comply with the requirements regarding rating yes are they compound wound yes

are they over compounded 5 per cent. yes, if not compound wound state distance between each generator 100 mm

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

PLANS. Are approved plans forwarded herewith for Shafting 31-1-36 Receivers 24-10-33 Düsseldorf Separate Tanks yes
 (If not, state date of approval)

SPARE GEAR See separate list

The foregoing is a correct description.

Wintertun

Manufacturer.



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Lloyd's Register
Foundation

003875-003883-0213

Dates of Survey while building { During progress of work in shops - - } 18-12-35 to 13-7-36 - 20 visits
{ During erection on board vessel - - - }
{ Total No. of visits }

Dates of Examination of principal parts—Cylinders 22-6-36, 2-7-36, 13-7-36 Covers 22-6-36, 2-7-36 Pistons 22-6-36, 2-7-36 Piston rods 22-6-36, 2-7-36

Connecting rods 22-6-36, 2-7-36, 13-7-36 Crank and Flywheel shaft 22-6-36, 2-7-36, 13-7-36 Intermediate shaft

Crank and Flywheel shafts, Material Annealed S.M. Ingot Steel Identification Mark Lloyd's 2821, F.S. 11-2-36, Lloyd's 5017, J.Q. 18-2-36, Lloyd's 10546 J.L. 25-2-36

Intermediate shafts, Material Identification Marks

Is this machinery duplicate of a previous case yes If so, state name of vessel "Melbourne Star"

General Remarks (State quality of workmanship, opinions as to class, &c.) These auxiliary engines have been constructed under special survey in accordance with the requirements of the Rules, the Secretary's letters and the approved plans. Materials and workmanship good. Full power trials of engines in shop satisfactory.

These engines have been dispatched to Messrs Bammell Laird & Co. Ltd, Birkenhead, to be installed in the vessel.

These Engines have been satisfactorily installed on board & examined under working conditions. The governing was found somewhat erratic, and arrangements have been made for this to receive further attention on vessel's return from present voyage.

J. S. Milton.

The amount of Fee ...

£ 14 25/- When applied for, 31st July 1936

Travelling Expenses (if any) £

When received, 4th Aug 36

W. G. Vallis

Surveyor to Lloyd's Register of Shipping.

WED 4 AUG 1937

TUE. 24 AUG 1937

TUE 14 SEP 1937

FRI 30 APR 1937

Committee's Minute

Assigned