

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 138

Received at London Office

17 AUG 1936

Date of writing Report 1st Aug. 1936 When handed in at Local Office 1st Aug. 1936 Port of Wintarthur

No. in Survey held at Wintarthur Date, First Survey 18th Dec., 35. Last Survey 13th July, 1936
Reg. Book. Wintarthur Number of Visits _____

on the Single Twin Triple Quadruple Screw vessel

"BRISBANE STAR"

Tons { Gross
Net

Built at Birkenhead By whom built Messrs Bammell Laird & Co Yard No. 1016 When built _____

Owners Messrs The Blue Star Line Ltd. Port belonging to London

Oil Engines made at Wintarthur By whom made Messrs Sulzer Bros Contract No. 19419, 19425 When made 1936

Generators made at _____ By whom made _____ Contract No. _____ When made _____

No. of Sets 3 Engine Brake Horse Power 500 each Nom. Horse Power as per Rule 228 Total Capacity of Generators _____ 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 as per Rule 179 mm. as fitted 210 " Crank pin dia. 180 mm. Crank Webs Mid. length breadth 276 mm. Thickness parallel to axis ✓ Mid. length thickness 93 mm. Thickness around eyehole ✓

Flywheel Shaft, diameter as per Rule 179 " as fitted 265 " Intermediate Shafts, diameter as per Rule _____ as fitted _____ Thickness of cylinder liners 27 mm.

Is a governor or other arrangement fitted to prevent racing of the engine when declatched 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. Reserve for cooling fuel valves Is the sea suction provided with an efficient strainer which can be cleared within the vessel _____

Lubricating Oil Pumps, No. and size 1 Gear wheel pump each engine. Capacity 1.1 litres per second.

Air Compressors, No. _____ No. of stages _____ Diameters _____ Stroke _____ Driven by _____

Scavenging Air Pumps, No. 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. _____ 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. 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/cm² Working pressure by Rules 654 lb sq in

ELECTRIC GENERATORS:—Type _____

Pressure of supply _____ volts. Load _____ Amperes. Direct or Alternating Current _____

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

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

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

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

is an adjustable regulating resistance fitted in series with each shunt 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 _____

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

SPARE GEAR See separate list

The foregoing is a correct description.

Wintarthur
Manufacturer.

Manufacturer.



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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 13-7-36, 22-6-36, 2-7-36. Covers 13-7-36, 22-6-36, 2-7-36. Pistons 13-7-36, 22-6-36, 2-7-36. Piston rods 13-7-36, 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.

1m, 9, 28 - Transfer. (The Surveyors are requested not to write on or below the space for Committee Minutes.)

The amount of Fee ... £ 14 25 : 31st July 1936
 Travelling Expenses (if any) £ : 4th Aug 36

W. S. Vallis
 Surveyor to Lloyd's Register of Shipping.

FRI 30 APR 1937

WED 4 AUG 1937
 TUE. 24 AUG 1937
 TUE 14 SEP 1937

Committee's Minute
 Assigned



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