

## REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 11279.

Date of writing Report 14. December 1940 When handed in at Local Office 19 Port of Copenhagen  
 No. in Survey held at Copenhagen Date, First Survey 29. July 1938 Last Survey 14. November 1940  
 Reg. Book. 38058 on the Single MOTOR ADELAIDE STAR Tons { Gross 12349  
Triple Screw vessel Net 7545  
Quadruple  
 Built at Copenhagen By whom built Maschinen- & Schiffsbauerei Yard No. 646 When built 1940  
 Owners Blue Star Line Ltd. Port belonging to London  
 Oil Engines made at Copenhagen By whom made Maschinen- & Schiffsbauerei ENGINES 3015 When made 1940  
 Generators made at Copenhagen By whom made A/S Tilsan GENERATORS 86749 When made 1939  
 No. of Sets 3 Engine Brake Horse Power 480 Nom. Horse Power as per Rule - Total Capacity of Generators 990 Kilowatts.

OIL ENGINES, &c.—Type of Engines Heavy oil engines, trunk piston, solidifying, 2 or 4 stroke cycle 2 Single or double acting single  
 Maximum pressure in cylinders 49 kg/cm<sup>2</sup> Diameter of cylinders 220 3/4 Length of stroke 370 1/2 No. of cylinders 8 No. of cranks 8  
 Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 300 1/2 - 330 1/2 Is there a bearing between each crank yes  
 Revolutions per minute 400 Flywheel dia. 980 1/4 Weight 1310 kg Means of ignition Compression Kind of fuel used Crude oil & paraffin  
 Crank Shaft, dia. of journals as per Rule 139.4 1/4 Crank pin dia. 180 1/4 Crank Webs Mid. length breadth 285 1/4 Thickness parallel to axis 102 1/4  
as fitted 180 1/4 Mid. length thickness 102 1/4 Thickness around eyehole 72.5 1/4  
 Flywheel Shaft, diameter as per Rule Intermediate Shafts, diameter as per Rule Thickness of cylinder liners 18 1/4  
as fitted as fitted  
 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 yes Are the exhaust pipes and silencers water cooled or lagged with non-conducting material lagged  
 Cooling Water Pumps, No. 1 off for each engine Is the sea suction provided with an efficient strainer which can be cleared within the vessel yes  
 Lubricating Oil Pumps, No. and size 1 off gear wheel pump for each engine, 11.3 Ton/Hour  
 Air Compressors, No. ✓ No. of stages ✓ Diameters ✓ Stroke ✓ Driven by ✓  
 Scavenging Air Pumps, No. 1 off for each engine CAPACITY 57 1/2 MIN Stroke rotary Driven by the engine

AIR RECEIVERS:—Have they been made under Survey yes State No. of Report or Certificate 860-861  
 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 ✓  
 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 2 x 2000 = 4000 Internal diameter 380 1/4 thickness 11 1/4  
 Seamless, lap welded or riveted longitudinal joint lap welded Material A.M. Steel Range of tensile strength 28.75/15 Working pressure by Rules 4.1 atm

ELECTRIC GENERATORS:—Type drip proof, ventilated  
 Pressure of supply 220 volts. Full Load Current 1500 Amperes. Direct or Alternating Current direct 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 yes  
 Generators, are they compounded as per rule yes 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  
 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 yes

PLANS. Are approved plans forwarded herewith for Shafting ✓ Receivers approved 2/1935 Separate Tanks ✓  
 (If not, state date of approval)

SPARE GEAR supplied as required by the Rules

The foregoing is a correct description,  
 BURMEISTER & WAIN'S MASCHIN- & SCHIFFSBYGGERI

Manufacturer.



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Lloyd's Register

Foundation



*Steel Twin Screw Motor Vessel ADELAIDE STAR of London*  
Yard No 646 by *Th. Burmeister & Wain's Maskin-og Rørbegyggelse, Copenhagen*

AUXILIARY MACHINERY.

- 1 *hp.* centrifugal ballast pump, 200 tons/hour.
- 3 " " cooling seawater pumps for main engine, 325 tons/hour each
- 2 " " freshwater " " " 325 " " "
- 1 " " seawater " " auxiliary " 40 " "
- 1 " " freshwater " " " 40 " "
- 1 " " bilge pump 110 " "
- 1 " " general service pump. 80 " "
- 3 " gearwheel lubricating oil pumps 280 " " "
- 1 " " fuel oil transfer pump 50 " "
- 1 " centrifugal sanitary pump 80 " "
- 1 " " fresh water domestic pump 20 " "
- 1 " fuel oil circulating pump
- 2 " " purifiers
- 2 " lubricating oil purifiers.

*L. Laursen*  
SURVEYOR TO LLOYD'S  
REGISTER OF SHIPPING

Dates of Survey while building  
During progress of work in shops - 29/7-9/8-10/11-1939  
During erection on board vessel - 12/10-14/10-7/11-8/11-14/11-20/11-21/11-29/11-1940  
Total No. of visits 46.

Dates of Examination of principal parts - Cylinders with Covers 1/6-26/9-28/3/10-27/11-29/11  
Piston rods  
Connecting rods 29/7-9/8-10/11-1939  
Crank and Flywheel shafts 21/6-17/7-16/8-19/9-1939  
Intermediate shafts LLOYD'S No 4929 44 19.9.39  
Crank and Flywheel shafts, Material *German Malleable Cast Steel* Identification Marks " " 4930 " " " " " " 4931 " " " " " "

Intermediate shafts, Material Identification Marks  
Identification marks on Air Receivers *EMERGENCY* NO 860 N 861 LLOYD'S TEST 56ATH. WP. 28ATH 15.4 2.8.39.

Is this machinery duplicate of a previous case *yes* If so, state name of vessel *Burmester & Wain standard type.*

General Remarks (State quality of workmanship, opinions as to class, etc.)  
*The above generator sets have been constructed under special survey and in accordance with the Society's Rules, the approved plan and the requirements in the Secretary's letter E dated 2/2-1939.*  
*The material has been tested as required by the Rules and the workmanship is good.*  
*On completion the generator sets were tested under full power working conditions and found to work satisfactorily.*

The amount of Fee ... £ : : When applied for, 19  
Travelling Expenses (if any) £ ✓ : : When received, 19

*L. Laursen*  
Surveyor to Lloyd's Register of Shipping.

Committee's Minute *FRI. 4 JAN 1946*  
Assigned *No Action*