

# REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 9337

Writing Report 6<sup>th</sup> August 1938 When handed in at Local Office 30.8.38 Port of MANCHESTER Received at London Office AUG 27 1938

Survey held at STOCKPORT Date, First Survey MARCH 18 1938 Last Survey 3 August 1938

on the Single Motor "SOBIESKI" Tons { Gross 11030  
Twin Screw Vessel  
Triple  
Quadruple

at Newcastle By whom built SWAN, HUNTER & WIGHAM RICHARDSON Yard No. 1572 When built 1938  
Port belonging to GDYNIA

Engines made at STOCKPORT By whom made CROSSLEY BROS LD ENGINE Contract No. 124183 When made 1938

Generators made at GATESHEAD-ON-TYNE By whom made CLARKE, CHAPMAN & CO LD GENERATOR Contract No. 10917 When made 1938

of Sets ONE Engine Brake Horse Power 70 Nom. Horse Power as per Rule 20 Total Capacity of Generators 46 Kilowatts.

ENGINES, &c.—Type of Engines VERTICAL SOLID INJECTION 2 or 4 stroke cycle 4 Single or double acting SINGLE  
Working pressure in cylinders 750 LBS Diameter of cylinders 5" Length of stroke 6 1/4" No. of cylinders 5 No. of cranks 5

Distance between bearings, adjacent to the Crank, measured from inner edge to inner edge 6 3/8" & 12 5/8" Is there a bearing between each crank -  
Revolutions per minute 1000 Flywheel dia. 24" Weight 460 LBS Means of ignition COMPRESSION Kind of fuel used HEAVY OIL

Crank Shaft, dia. of journals as per Rule As APPROVED Crank pin dia. 3 1/4" Crank Webs Mid. length breadth 5" Thickness parallel to axis SOLID  
as fitted 3 1/2" Mid. length thickness 1 7/8" Thickness around eyehole

Intermediate Shafts, diameter as per Rule - Thickness of cylinder liners 9/32"  
as fitted

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 NO Are the exhaust pipes and silencers water cooled or lagged with non-conducting material -

Number of Water Pumps, No. ONE Is the sea suction provided with an efficient strainer which can be cleared within the vessel -  
Number of Lifting Oil Pumps, No. and size ONE 1 1/8" DIA > 1 3/32" STROKE

Number of Compressors, No. ONE No. of stages TWO Diameters 2 1/8" & 2 3/8" Stroke 1" Driven by ENGINE  
Number of Lifting Air Pumps, No. - Diameter - Stroke - Driven by -

RECEIVERS:—Have they been made under Survey YES State No. of Report or Certificate -  
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 - What means are provided for cleaning their inner surfaces -  
Is there a drain arrangement fitted at the lowest part of each receiver YES

Number of Pressure Air Receivers, No. - Cubic capacity of each - Internal diameter - thickness -  
Is the joint, lap welded or riveted longitudinal joint - Material - Range of tensile strength - Working pressure by Rules -

Number of Lifting Air Receivers, No. ONE Total cubic capacity 0.50 CUB. FT. Internal diameter 5 1/8" thickness 3/16"  
Is the joint, lap welded or riveted longitudinal joint SEAMLESS Material STEEL Range of tensile strength - Working pressure by Rules APPROVED

ELECTRIC GENERATORS:—Type -  
Voltage of supply 220 volts. Full Load Current 209 Amperes. Direct or Alternating Current DIRECT

Is the 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  
Are the generators, are they compounded as per rule YES Is there an adjustable regulating resistance fitted in series with each field -

Are all terminals accessible, clearly marked, and furnished with sockets -  
Are the terminals so spaced or shielded that they cannot be accidentally earthed, short circuited, or touched - Are the lubricating arrangements of the generators as per Rule YES

Do the generators are under 100 kw. full load rating, have the Makers supplied certificates of test YES and do the results comply with the requirements YES  
Do the generators are 100 kw. or over have they been built and tested under survey -

Are approved plans forwarded herewith for Shafting YES Receivers YES Separate Tanks YES  
(If not, state date of approval)

RE GEAR As PER RULE REQUIREMENTS.

The Emergency Oil Engine Dynamo Lighting Set has been fitted on "D" Deck abaft the Eng. Room on the M.V. SOBIESKI, Yard No 1572. (SHAW & CO) tried under working conditions and found satisfactory

AWATT  
Newcastle on Tyne  
25/5/39.

The foregoing is a correct description,  
CROSSLEY BROTHERS LTD.,  
Fred Maynard, Manufacturer.



Dates of Survey while building  
 During progress of work in shops - - ) MAR 18. 28. JUNE 29. JULY 15. AUG 3  
 During erection on board vessel - - - )  
 Total No. of visits 5.

Dates of Examination of principal parts—Cylinders 29-6-38, Covers 29-6-38, Pistons 29-6-38, Piston rods —  
 Connecting rods 18.3.38, Crank and Flywheel shafts 18.3.38, Intermediate shafts —

Crank and Flywheel shafts, Material STEEL, Identification Marks LLOYDS G.R.C. 953. 18.3.38.

Intermediate shafts, Material —, Identification Marks —

Identification marks on Air Receivers LLOYDS TEST  
14.6.38.  
N.P. 600 lbs. R.W.L.

Is this machinery duplicate of a previous case — If so, state name of vessel —

General Remarks (State quality of workmanship, opinions as to class, &c.)

THIS ENGINE HAS BEEN CONSTRUCTED UNDER SPECIAL SURVEY OF TESTED MATERIAL AND IS IN ACCORDANCE WITH THE SECRETARY'S LETTERS, APPROVED PLANS AND RULE REQUIREMENTS. THE MATERIALS AND WORKMANSHIP ARE OF A GOOD QUALITY AND THE SET WHEN TESTED IN SHOP UNDER FULL LOAD CONDITIONS SHOWN GOOD RESULTS. IN OUR OPINION THE SET IS SUITABLE TO BE PLACED ON BOARD A VESSEL, CLASSED WITH THIS SOCIETY, FOR THE PURPOSE INTENDED. GENERATOR CERTIFICATE ATTACHED.

1 in. 5. 8. 7. — Transfer. (The Surveyors are requested not to write on or below the space for Committee Minute.)

The amount of Fee ... £ 5 : 5 : 0 When applied for, 4.8.1938, M.  
 Travelling Expenses (if any) £ 10 : 0 When received, 5.10.1938, [Signature]

[Signature] + for M.A. Black  
 Surveyors to Lloyd's Register of Shipping.

Committee's Minute WED 31 MAY 1939  
 Assigned See Nwo. 38-94503

