Rpt. 4c.

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 24176 a

Received at London Office

Date of writing Report ..... 19 ... When handed in at Local Office ..... 19 ... Port of Hamburg

No. in Reg. Book. 23490. Survey held at ..... Date, First Survey ..... Last Survey ..... 19 ... Number of Visits

on the Single / ~~Twin~~ / ~~Triple~~ / ~~Quadruple~~ Screw vessel DRUPA. Tons Gross 8102 Net 4754.

Built at HAMBURG. By whom built DEUTSCHE WERFT A.G. Yard No. 218. When built 1939-8.

Owners ..... Port belonging to .....

Oil Engines made at MANNHEIM. By whom made MOTOREN-WERKE MANNHEIM A.G. Contract No. 41717. When made .....

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

No. of Sets ..... Engine Brake Horse Power ..... Nom. Horse Power as per Rule ..... Total Capacity of Generators ..... Kilowatts.

OIL ENGINES, &c.—Type of Engines HEAVY OIL TYPE R.H. 326 Z. 2 or 4 stroke cycle 4 Single ~~or double~~ acting YES.

Maximum pressure in cylinders 45 kgs/cm². Diameter of cylinders 175 mm. Length of stroke 260 mm. No. of cylinders 2 No. of cranks 2.

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 216 mm. Is there a bearing between each crank YES.

Revolutions per minute 390. Flywheel dia. 1200 mm. Weight 1630 kgs. Means of ignition COMPRESSION Kind of fuel used HEAVY OIL

Crank Shaft, dia. of journals as per Rule 95 mm. / as fitted 110 mm. Crank pin dia. 110 mm. Crank Webs Mid. length breadth 145 mm. Thickness parallel to axis ✓ / Mid. length thickness 48·5 mm. shrunk Thickness around eyehole ✓

Flywheel Shaft, diameter as per Rule 95 mm. / as fitted 110 mm. **Intermediate Shafts**, diameter as per Rule ✓ / as fitted ✓ Thickness of cylinder liners .....

Is a governor or other arrangement fitted to prevent racing of the engine when declutched ? Means of lubrication ?

Are the cylinders fitted with safety valves ? Are the exhaust pipes and silencers water cooled or lagged with non-conducting material ?

Cooling Water Pumps, No. ? Is the sea suction provided with an efficient strainer which can be cleared within the vessel ?

Lubricating Oil Pumps, No. and size ?

Air Compressors, No. Solid injection No. of stages ..... Diameters ..... Stroke ..... Driven by ?

Scavenging Air Pumps, No. ✓ Diameter ✓ Stroke ✓ Driven by ?

AIR RECEIVERS:—Have they been made under Survey ? State No. of Report or Certificate Seibath

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 225 ltrs Internal diameter ? thickness ?

Seamless, lap welded or riveted longitudinal joint ? Material ? Range of tensile strength ? Working pressure by Rules ?

ELECTRIC GENERATORS:—Type ?

Pressure of supply ? volts. **Full Load Current** ? Amperes. **Direct or Alternating 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 ?

Generators, are they compounded as per rule ? 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 ?

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 ?

PLANS. Are approved plans forwarded herewith for Shafting 4/5/38. (If not, state date of approval) Receivers No. Separate Tanks No.

SPARE GEAR

The foregoing is a correct description.

Manufacturer.

Dates of Survey while building { During progress of work in shops - - ✓ / During erection on board vessel - - - ✓ / Total No. of visits ?

Dates of Examination of principal parts—Cylinders ____ Covers ____ Pistons ____ Piston rods ____

Connecting rods ____ Crank and Flywheel shafts ____ Intermediate shafts ____

Crank and Flywheel shafts, Material ____ Identification Marks ?

Intermediate shafts, Material ____ Identification Marks ?

Identification marks on Air Receivers ____

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. ____

Aux air bottles - 2
1 a/in 8/415/48 CH 101882
Probedruck - 60 a/in
Inhalt 150 ltr

Sweden 37/8/287/9 CH 88809
~~Pro~~ LR CA 75 ltr
Probedruck 60 a/in.

HS.

The amount of Fee ... ... £ : : { When applied for, ... 19.....

Travelling Expenses (if any) £ : : { When received. ..... 19.....

Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI. 23 FEB 1940

Assigned See Harm. 24176 a. F.C

1m,11,37.—Transfer. (MADE IN ENGLAND.)

(The Surveyors are requested not to write on or below the space for Committee Minute.)