

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 4983

Date of writing Report 10th Oct. 1939. When handed in at Local Office

Received at London Office 24 OCT 1939
Port of Stockholm.

No. in Survey held at Sickla, Skm. Distrikt

Date, First Survey 22.9.37 Last Survey 22.8.1939

Reg. Book.

Number of Visits 10

Single
on the Twin
Triple
Quadruple

Screw vessel

1/2 "BEYERLAND"

NOTE: Engines to be installed at Messrs. Boele's Scheepswerven en

Haskins Fabrik, Rotterdam

Tons { Gross
Net

Built at Rotterdam.

By whom built Van der Giessen & Zonen, Schiedamschen N.V. Yard No.

When built

Owners Shipping & Coal Company.

Port belonging to Rotterdam.

Oil Engines made at Stockholm

By whom made A.B. Atlas-Diesel.

Contract No. 85712 When made 1939

Generators made at

By whom made

Contract No. When made

No. of Sets 1

Engine Brake Horse Power 100

Nom. Horse Power as per Rule 18

Total Capacity of Generators Kilowatts.

OIL ENGINES, &c.—Type of Engines *Hor. Diesel Oil Engine, type K42E* 2 stroke cycle 2 Single or double acting *Single*Maximum pressure in cylinders *60 kg/cm²* Diameter of cylinders *180 mm* Length of stroke *300 mm* No. of cylinders 2 No. of cranks 2Span of bearings, adjacent to the Crank, measured from inner edge to inner edge *218 mm* Is there a bearing between each crank *Yes.*Revolutions per minute *600* Flywheel dia. *900 mm* Weight *457 kg.* Means of ignition *Compression.* Kind of fuel used *Heavy Diesel Oil.*Crank Shaft, dia. of journals *as per Rule* *125 mm* Crank pin dia. *120 mm* Crank Webs *Mid. length breadth 214 mm* Thickness parallel to axis *shrunk*The Flywheel is *as per Rule* *as fitted* *125 mm* Intermediate Shafts, diameter *as per Rule* *as fitted* *125 mm* Thickness of cylinder liners *13 mm*Is a governor or other arrangement fitted to prevent racing of the engine when declutched *Yes.* Means of lubrication *pumps.*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. *One.* Is the sea suction provided with an efficient strainer which can be cleared within the vesselLubricating Oil Pumps, No. and size *One. 63 litres/min.*Air Compressors, No. *None fitted.* No. of stages Diameters Stroke Driven byScavenging Air Pumps, No. *One* Diameter *260 mm.* Stroke *220 mm.* Driven by *Engine.*AIR RECEIVERS:—Have they been made under Survey *Yes.* State No. of Report or CertificateIs 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 *Hudhole.*Is there a drain arrangement fitted at the lowest part of each receiver *Yes.*High Pressure Air Receivers, No. *None fitted* 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. *One* Total cubic capacity *100 litres* Internal diameter *340 mm.* thickness *16 mm.*Seamless, lap welded or riveted longitudinal joint *Lap welded.* Material *S.N. Steel.* Range of tensile strength *38 kg/mm²* Working pressure by Rules *50 kg/cm² as a min.*

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 *E. 7/1/37.* Receivers *E. 24/4/35.* Separate Tanks

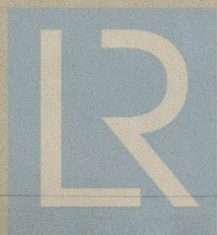
SPARE GEAR as per enclosed list. The spare gear has been examined before it was despatched.

The foregoing is a correct description.

AKTIEBOLAGET ATLAS DIESEL

S. Jacobsson

Manufacturer.



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Dates of Survey while building { During progress of work in shops - - } 22, 19, 37, 10, 16, 24, 6, 27, 38, 3, 18, 22, 39.
 { During erection on board vessel - - - }
 Total No. of visits 10 in shop.

Dates of Examination of principal parts—Cylinders 18/8/39 Covers 18/8/39 Pistons 18/8/39 Piston rods

Connecting rods 22, 19, 37, 16, 6, 38, 18, 39 Crank and Flywheel shafts 10, 24, 38, 18, 39 Intermediate shafts

Crank and Flywheel shafts, Material S.H. Steel.

Identification Marks

LLOYDS NO 8389

Intermediate shafts, Material

Identification Marks

F.C. 24.3.38

Identification marks on Air Receivers

LLOYDS NO 8546

LLOYDS TEST 100 kg.

W.P. 50 kg.

T.B. 27.9.38

Is this machinery duplicate of a previous case Yes If so, state name of vessel Please See Shm. Rpt. No 4643

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

I am of opinion that this engine is of superior material and workmanship and as it has been designed and constructed under Special Survey I respectfully submit that it be approved as auxiliary to the classed main engine to be installed in the "Beyerland".

The amount of Fee ...

£ 190.-

When applied for,

11.10.1939

Travelling Expenses (if any) £

When received,

20.12.1939

Folke Cassel.

Surveyor to Lloyd's Register of Shipping.

Committee's Minute

FRI. 17 NOV. 1939

Assigned

See Rob. & E. 28639



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