

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS

No. 4595

FEB 23 1938

Received at London Office

Date of writing Report 19th Feb. 1938 When handed in at Local Office 19 Port of Stockholm

No. in Survey held at Sieckla Sku District Date, First Survey 25/4/35 Last Survey 14/12/ 1937
Reg. Book. Number of Visits 17

on the Single Twin Triple Quadruple Screw vessel Tons { Gross _____ Net _____

Built at Abu. By whom built O.Y. Crichton-Vulean. A-B. Yard No. 747 When built _____

Owners Zegluga Polska. Port belonging to Gdynia.

Oil Engines made at Stockholm By whom made A-B. Atlas Diesel. Contract No. 85575, 85631 When made 1937

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

No. of Sets 2. Engine Brake Horse Power 2.100 Nom. Horse Power as per Rule 2x18 Total Capacity of Generators _____ Kilowatts.

OIL ENGINES, &c.—Type of Engines Hux. Diesel Oil Engine, type K42E 2 or 4 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 2.

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 218 mm. Is there a bearing between each crank _____

Revolutions per minute 600 Flywheel dia. 900 mm. Weight 457 kg. Means of ignition Compression Kind of fuel used Marine Diesel Oil.

Crank Shaft, dia. of journals _____ as per Rule _____ as fitted 125 mm. Crank pin dia. 120 mm. Crank Webs _____ Mid. length breadth 214 mm. Thickness parallel to axis _____ Mid. length thickness 54 mm. Thickness around eyehole _____

The Flywheel is fitted on the crankshaft. Flywheel Shaft, diameter _____ as fitted _____ Intermediate Shafts, diameter _____ as fitted _____ Thickness of cylinder liners 12 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 _____

Cooling Water Pumps, No. 2 x 1. Is the sea suction provided with an efficient strainer which can be cleared within the vessel _____

Lubricating Oil Pumps, No. and size 2 x 1. Capacity 63 litres/min each.

Air Compressors, No. None fitted No. of stages _____ Diameters _____ Stroke _____ Driven by _____

Scavenging Air Pumps, No. 2 x 1. Diameter 260 mm. Stroke 220 mm. Driven by Engine.

AIR 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.

Can the internal surfaces of the receivers be examined Yes. What means are provided for cleaning their inner surfaces slushhols.

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. 2 x 1. Total cubic capacity 2 x 100 litres Internal diameter 340 mm. thickness 16 mm.

Seamless, lap welded or riveted longitudinal joint lapwelded Material S.H. 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 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
G. Jacobson

Measured

Manufacturer.



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007072-007077-0068

Dates of Survey while building
 During progress of work in shops - - 25, 8, 35; 20, 14, 23, 28, 36; 12, 20, 22, 7, 27, 3, 13, 19, 28, 2, 14
 During erection on board vessel - - - 4, 8, 8, 9, 12, 1, 11, 12, 1, 4, 6, 10, 11, 12
 Total No. of visits 17 in shop.

Dates of Examination of principal parts—Cylinders 3/11, 2/12 37 Covers 3/11, 2/12 37 Pistons 3/11, 2/12 37 Piston rods ✓

Connecting rods 25, 8, 35; 20, 14, 23, 36, 12, 3, 2, 37
 4, 8, 8, 9, 12, 1, 11, 12 Crank and Flywheel shafts 25, 36; 20, 22, 7, 3, 2, 37
 12, 1, 4, 6, 11, 12 Intermediate shafts 85575, 85631

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

Identification Marks

LLOYDS NO 6871	LLOYDS NO 2017
T.B. 20.1.37	K.R. 7.6.37

Intermediate shafts, Material

Identification Marks

Identification marks on Air Receivers

N ^o 7168 LLOYDSTEST 100 kg. W. P. 50 kg. T.B. 13.11.37.	N ^o 7182 LLOYDSTEST 100 kg. W. P. 50 kg. T.B. 19.11.37.
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Is this machinery duplicate of a previous case Yes ✓ If so, state name of vessel Please see Skw. Rpt. 4594. ✓

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

We are of opinion that these engines are of superior material and workmanship, and as they have been designed and constructed under special survey, we have respectfully to submit that they be approved as auxiliaries, when installed into H.M.S. O.V. Crichton. Vulcan A.B. of Abs. No 747, to the satisfaction of the Society's Surveyors. ✓

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

The amount of Fee £ K. 456.-

When applied for,

19

Travelling Expenses (if any) £

When received,

4.5.19.38

R. J. Anderson & Thomas Talbot
 Surveyor to Lloyd's Register of Shipping.

Committee's Minute

FRI 6 MAY 1938

Assigned

See H/S 1511



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