

RECEIVED

Rpt. 4c.  
15 SEP 1949

## REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 2464

10 SEP 1949

Date of writing Report 1949 When handed in at Local Office 19 Port of Stockholm.

No. in Survey held at Eskilstuna Date, First Survey 17.6. Last Survey 19.8. 1949.

Reg. Book. - on the Single Triple Quadruple Screw vessel. Number of Visits 4

Built at Gothenburg By whom built AB Lindholmens Varv Yard No. 1011 When built -

Owners - Port belonging to -

Oil Engines made at Eskilstuna By whom made AB Bolinder-Munktell Engines 38200-2

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

No. of Sets 2 Engine Brake Horse Power 2 x 75 M.N. as per Rule 2 x 19 Total Capacity of Generators - Kilowatts.

Is Set intended for essential services. Yes

OIL ENGINES, &amp;c.—Type of Engines Hot bulb, trunk piston 2 or 4 stroke cycle 2 Single or double acting SA

Maximum pressure in cylinders 21 kg/cm<sup>2</sup> Diameter of cylinders 180 mm Length of stroke 180 mm No. of cylinders 3 No. of cranks 3Mean indicated pressure 3.95 kg/cm<sup>2</sup> Firing order in cylinders 1,3,2. Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 720 mm.Is there a bearing between each crank. No Moment of inertia of flywheel (16 m<sup>2</sup> or Kg.-cm.<sup>2</sup>) - Revolutions per minute 800

Flywheel dia. 606 mm. Weight 128 kgs. Means of ignition Hot bulb Kind of fuel used Diesel oil.

Crank Shaft, dia. of journals as appd. &amp; 85 mm. Crank pin dia. 120 mm. Crank Webs Mid. length breadth 180 mm Thickness parallel to axis -

Flywheel Shaft, diameter as per Rule. Intermediate Shafts, diameter as per Rule. General armature, moment of inertia (16 m<sup>2</sup> or Kg.-cm.<sup>2</sup>) -Are means provided to prevent racing of the engine ~~Yes~~ Yes Means of lubrication Autom. Kind of damper if fitted -Are the cylinders fitted with safety valves. Yes Are the ~~silencers~~ silencers water cooled ~~Yes~~ Yes

Cooling Water Pumps, No. One to each engine. Is the sea suction provided with an efficient strainer which can be cleared within the vessel. -

Lubricating Oil Pumps, No. and size Automatic lubricators.

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

Scavenging Air Pumps, No. Crankcase scavenging. Diameter. Stroke. Driven by.

AIR RECEIVERS:—Have they been made under Survey. Yes State No. of Report or Certificate. Copies attach.

Is each receiver, which can be isolated, fitted with a safety valve as per Rule. -

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. -

High Pressure Air Receivers, No. None 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 to each eng. Total cubic capacity 4 x 30 litres Internal diameter 220 mm. thickness 5 mm.

Seamless, lap welded or riveted longitudinal joint. Welded Material S.M. Steel Range of tensile strength 41/47 Kg. Working pressure by Rules 15 Kg. per sq.cm.

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 as per Rule when full load is suddenly thrown on and off. Yes. See below

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. -

Details of driven machinery other than generator. -

PLANS.—Are approved plans forwarded herewith for Shafting 15.7.47. Receivers. - Separate Tanks. -

Have Torsional Vibration characteristics if applicable been approved. - Armature shaft Drawing No. -

SPARE GEAR To be checked onboard.

The foregoing is a correct description,

Aktiebolaget Bolinder-Munktell  
Försäljningsavdelningen

Manufacturer.



© 2020

Lloyd's Register  
Foundation

002289-002297-0091



7407 4<sup>c</sup>

17th June to 19th August, 1949.

Dates of Survey while building { During progress of work in shops - -  
During erection on board vessel - -  
Total No. of visits 4 in shop.

Dates of Examination of principal parts—Cylinders 17&21/6-49 Covers 17 & 21/6-49 Pistons 21/6-49 Piston rods -  
Connecting rods 21/6-49 Crank ~~and flywheel~~ shafts 21/6 & 12/8-49 Intermediate shafts -  
Crank shaft { Material S.M. Steel Tensile strength 82.8 & 74.5 kg/mm<sup>2</sup>  
Elongation 23.0 & 26.0 % Identification Marks LLOYD'S 5257 HBS 21.6.49.  
LLOYD'S 5254 HBS 12.8.49.  
Flywheel shaft, Material - Identification Marks -  
Identification marks on Air Receivers Nos. 2017, 2028, 2029 & 2030.  
LLOYD'S TEST 30 Kg.  
WP 15 Kg.  
OS 18.3.49.

Is this machinery duplicate of a previous case Yes If so, state name of vessel Lindholmens Yard No. 1010, Skm.Rpt.No. 7345.

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.)

These auxiliary engines have been built under special survey in accordance with the Rules and approved plans, the workmanship and materials are good and tests sheets for the crankshafts are attached.

The engines have been examined under full power working conditions on the test bed and found in order with the exception that the permanent speed variation when the load was thrown suddenly off, exceeded the 6% permitted by the Rules.

It is therefore recommended that the class should be made subject to the governors being further tested after installation onboard.

The amount of Fee ... Kr. 160:--: { When applied for 2/9 1949  
Travelling Expenses (if any) Kr. 66:--: { When received 19

Committee's Minute FRI. 10 MAR 1950  
Assigned In minute see J.E. Rf