

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

Date of writing Report 17/9 1947 When handed in at Local Office Stockholm Received at London Office 18 SEP 1947 Port of Stockholm

No. in Reg. Book 89472 Survey held at Eskilstuna & Lidingö Date, First Survey 13.11.46 Last Survey 23.8.47 1947

on the Single Screw vessel "VATNAJÖKULL" Number of Visits 4

Built at Lidingö By whom built A/B Lidingöverken Yard No. 5 When built 1947

Owners H.F. Jöklar Port belonging to Rejkjavik

Oil Engines made at Eskilstuna By whom made A/B Bolinder-Munktell Engine Contract No. 37159 When made 1946

Generators made at Helsingborg By whom made Elektromekano Gen. Contract No. 434102 When made 1946

No. of Sets 1 Engine Brake Horse Power 10 Nom. Horse Power as per Rule 2.5 Total Capacity of Generators 5 Kilowatts.

OIL ENGINES, &c.—Type of Engines Bolinder W3S12. Trunk piston 2 or 4 stroke cycle 2 Single or double acting Single

Maximum pressure in cylinders 21 kg/cm² Diameter of cylinders 120 m/m Length of stroke 120 m/m No. of cylinders 1 No. of cranks 1

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 216 m/m Is there a bearing between each crank -

Revolutions per minute 1000 Flywheel dia. 600 m/m Weight 125 kgs. Means of ignition Hot bulb Kind of fuel used Diesel oil

Crank Shaft, dia. of journals 50 m/m as fitted 50 m/m Crank pin dia. 60 m/m Crank Webs Mid. length breadth 112 m/m Thickness parallel to axis - Mid. length thickness 31 " shrunk Thickness round eyehole -

Flywheel Shaft, diameter - as fitted - Intermediate Shafts, diameter - as fitted - Thickness of cylinder walls 8 mm.

Is a governor or other arrangement fitted to prevent racing of the engine when detached Yes Means of lubrication Automatic

Are the cylinders fitted with safety valves No Are the exhaust pipes and silencers water cooled or lagged with non-conducting material Lagged

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

Lubricating Oil Pumps, No. and size Lubrication is by automatic lubricators.

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

Scavenging Air Pumps, No. None Diameter - Stroke - Driven by -

AIR RECEIVERS:—Have they been made under Survey None State No. of Report or Certificate -

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

Can 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 -

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. None Total cubic capacity - Internal diameter - thickness -

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

ELECTRIC GENERATORS:—Type Drip-proof compound

Pressure of supply 230 volts. Full Load Current 21.8 Amperes. Direct or Alternating Current D.C.

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 Generators, are they compounded as per Rule Yes is an adjustable regulating resistance fitted in series with each shunt field Yes

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

If 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

If the generators are 100 kw. or over have they been built and tested under survey -

PLANS.—Are approved plans forwarded herewith for Shafting 20.1.36 Receivers - Separate Tanks -

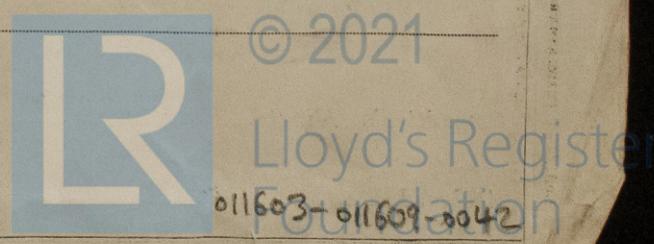
SPARE GEAR As per Rule supplied.

The foregoing is a correct description,

Aktiefelaget Bolinder-Munktell
Försäljningsavdelningen

Manufacturer.

P. J. J. J.



Dates of Survey while building { During progress of work in shops - - } 3.11.46.
 { During erection on board vessel - - } 12.6.47, 20.7.47, 23.8.47.
 Total No. of visits..... 4

Dates of Examination of principal parts—Cylinders 13.11.46 Covers 13.11.46 Pistons 13.11.46 Piston rods -

Connecting rods 13.11.46 Crank and Flywheel shafts 13.11.46 Intermediate shafts -

Crank shaft { Material S.M. Steel Tensile strength 56.7 kg/mm²
 { Elongation 30.0 on 50 m/m Identification Marks LLOYD'S 4636 HBS 13.11.46.

Flywheel shaft, Material - Identification Marks -

Is this machinery duplicate of a previous case..... No 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.).....

This auxiliary engine for driving an air compressor and /or a harbour lighting dynamo has been built under Special Survey in accordance with the Rules and approved plan.

The workmanship and materials are good and test sheets for the crankshaft is attached. The engine has been securely fitted in the vessel under my inspection and to my satisfaction, examined under working conditions and found in order.

1m.11.42-T (MADE AND PRINTED IN ENGLAND).
 (The Surveyors are requested not to write on or below the space for Committee Minutes.)

The amount of Fee ... £ - : { When applied for 19
 Travelling Expenses (if any) £ - : { When received 19

W.B. Liggins
 Surveyor to Lloyd's Register of Shipping.

Committee's Minute..... **FRI. 24 OCT 1947**
 Assigned..... *See F.E. mch. rpt.*

