

Rpt. 4c.

# REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS

No. 2/30

31 JAN 1949

Received at London Office

Stockholm.

Date of writing Report 1939 When handed in at Local Office 1949 Port of Stockholm.

No. in Survey held at Norrtälje Date, First Survey and Last Survey 21.1 1949

Reg. Book. - on the Twin Triple Quadruple } Screw vessel - M.S. Vale

Built at Marstrand By whom built Marstrands Mek. Verkstad Yard No. 20 When built -

Owners V. Hansén & Co. Port belonging to -

Oil Engines made at Norrtälje By whom made Motor AB Pythagoras motor No. 4784 When made 1949

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

No. of Sets 1 Engine Brake Horse Power 10 M.N. as per Rule 2.5 Total Capacity of Generators - Kilowatts.

Set intended for essential services Yes.

**OIL ENGINES, &c.**—Type of Engines Semi-Diesel, R-10-A 2 or 4 stroke cycle 2 Single or double acting SA

Maximum pressure in cylinders 22 kg/cm<sup>2</sup> Diameter of cylinders 140 m/m Length of stroke 150 m/m No. of cylinders 1 No. of cranks -

Mean indicated pressure 3.75 kg/cm<sup>2</sup> Firing order in cylinders - Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 210 m/m

Is there a bearing between each crank - Moment of inertia of flywheel (16 m<sup>2</sup> or Kg.-cm.<sup>2</sup>) - Revolutions per minute 800

Flywheel dia. 510 m/m Weight 100 kgs. Means of ignition Compression Kind of fuel used Heavy oil

Crank Shaft, dia. of journals 55 m/m Crank pin dia. 60 m/m Crank Webs 40 m/m

Flywheel Shaft, diameter Intermediate Shafts, diameter 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 when declutched Yes Means of lubrication Forced Kind of damper if fitted -

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

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

Lubricating Oil Pumps, No. and size One

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 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

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

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 Clutch driven pump, clutch driven compressor.

**PLANS.**—Are approved plans forwarded herewith for Shafting "E" 2.4.48. Receivers Separate Tanks

(If not, state date of approval)

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

(state date of approval)

**SPARE GEAR** As per Rule supplied and should be checked onboard.

The foregoing is a correct description,

*Pythagoras*

Manufacturer.



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Dates of Survey while building { During progress of work in shops - - ) 21.1.49  
{ During erection on board vessel - - ) -  
Total No. of visits. One in shop.

Dates of Examination of principal parts—Cylinders 21.1.49 Covers 21.1.49 Pistons 21.1.49 Piston rods -  
Connecting rods 21.1.49 Crank ~~and~~ Flywheel shafts 21.1.49 Intermediate shafts -

Crank shaft { Material S.M. Steel Tensile strength 59.8 kg/mm<sup>2</sup>  
Elongation 28.0 % on 50 m/m Identification Marks LLOYD'S 608 SA 21.9.48.

Flywheel shaft, Material - Identification Marks -

Identification marks on Air Receivers -

Is this machinery duplicate of a previous case No If so, state name of vessel -

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

This aux. engine has been built under Special Survey in accordance with the Rules and approved plans. The workmanship is good and the materials fulfil the requirements of the Rules.

The engine has been examined under working conditions in the shop at the Makers' Works and found satisfactory.

The amount of Fee ... Kr. 80:-- : When applied for 29/ 1949

Travelling Expenses (if any) Kr. 20:60 : When received 19

Committee's Minute

Assigned No Action

Rpt. 13.

Date of writing R

No. in Reg. Book.

.96316.....

Built at .....

Owners .....

Electrical In

Is vessel fitte

Have plans bee

Heating....--

has the governi

trip switch as p

if not compoun

arranged to run

Negati

test for machin

of the generato

engine room

near unprotected

injury and dam

contact ....Yes.

.....

are they in acc

and oil ....Ye

material is use

semi-insulating

Is the constru

to pilot and e

side of switches

a fuse on

.....

and for each

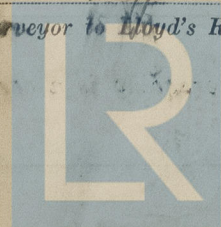
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ammeters .....

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Surveyor to Lloyd's Register of Shipping.



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