pt. 4c.

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 2814

Received at London Office 2 AUG

te of writing Report 29/7 19 50. When handed in at Local Office 19 Port of Stockholm

No. in g. Book. - Survey held at Hedemora Date, First Survey 2.5.50 Last Survey 22.6. 1950

on the Single / Twin / Triple / Quadruple Screw vessel - Number of Visits 6

Tons Gross 10500 Net -

uilt at Gothehburg By whom built AB. Lindholmens Verv Yard No. 1013 When built 1950

wners Van Ommeren's Scheepvaartbedrijf N.V. Phs. Port belonging to Rotterdam

l Engines made at Hedemora By whom made AB. Hedemora Verkstäder Engine ~~Contract~~ No. 40,41,42 When made 1950

nerators made at Odense By whom made Thomas B. Thrige A. S. Generator ~~Contract~~ No. 3003535-6-7 When made 1950

. of Sets 3 Engine Brake Horse Power 3 x 210 M.N. as per Rule 3 x 52 Total Capacity of Generators 420 Kilowatts.

Set intended for essential services Yes

IL ENGINES, &c.—Type of Engines Götaverken D.M. 240/360 H.5 2 or 4 stroke cycle 4 Single or double acting SA

aximum pressure in cylinders 45kg/cm² Diameter of cylinders 240 mm. Length of stroke 360mm. No. of cylinders 5 No. of cranks 5

ean indicated pressure 6.8kg/cm² Firing order in cylinders 1.3.5.4.2 Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 311 mm.

ave b there a bearing between each crank Yes Moment of inertia of flywheel (16 m² or Kg.-cm.²) - Revolutions per minute 450

ywheel dia 1250 mm. Weight 1910 kg. Means of ignition Compression Kind of fuel used Heavy oil

rank Shaft, dia. of journals appr & ~~xxxxxxx~~ as fitted 160 mm. Crank pin dia. 160 mm. Crank Webs Mid. length breadth 215 mm. Thickness parallel to axis - Mid. length thickness 80 mm. shrunk Thickness round eyehole -

ywheel Shaft, diameter as per Rule - as fitted - **Intermediate Shafts,** diameter as per Rule - as fitted - General armature, moment of inertia (16 m² or Kg.-cm.²) -

re means provided to prevent racing of the engine when declutched Yes Means of lubrication Forced Kind of damper if fitted None

e the cylinders fitted with safety valves Yes Are the exhaust pipes and silencers water cooled or lagged with non-conducting material lagged

ooling Water Pumps, No. None Is the sea suction provided with an efficient strainer which can be cleared within the vessel -

ubricating Oil Pumps, No. and size One on each engine

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

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

IR RECEIVERS:—Have they been made under Survey State No. of Report or Certificate

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

n the internal surfaces of the receivers be examined What means are provided for cleaning their inner surfaces

there a drain arrangement fitted at the lowest part of each receiver

gh Pressure Air Receivers, No. Cubic capacity of each Internal diameter thickness

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

arting Air Receivers, No. Total cubic capacity Internal diameter thickness

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

LECTRIC GENERATORS:—Type Drip proof, compound Thrige Type KL 21 B (Certificates attached)

essure of supply 230 volts. **Full Load Current** 3 x 610 Amperes. **Direct or Alternating Current** DC

alternating current system, state the periodicity - Has the **Automatic Governor** been tested and found as per Rule when full load is suddenly thrown

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

re all terminals accessible, clearly marked, and furnished with sockets - Are they so spaced

shielded that they cannot be accidentally earthed, short circuited, or touched - Are the lubricating arrangements of the generators as per Rule Yes

the generators are under 100 kw. full load rating, have the makers supplied certificates of test - and do the results comply with the requirements -

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

etails of driven machinery other than generator None

LANS.—Are approved plans forwarded herewith for Shafting No. 8.7.49 Receivers No. 9.7.49. Separate Tanks -
(If not, state date of approval)

ave Torsional Vibration characteristics if applicable been approved Yes 9.7.49 for +50% Armature shaft Drawing No. 162998
(state date of approval)

PARE GEAR supplied by Makers should be checked onboard.

The foregoing is a correct description,

AKTIEBOLAGET HEDEMORA VERKSTÄDER

Manufacturer.

013268-013271-0238

LC 7817

Dates of Survey while building { During progress of work in shops - - 1950 May 2.3.25. June 20.21.22. / During erection on board vessel - - - / Total No. of visits 6

Dates of Examination of principal parts—Cylinders 2.5.50 Cyl. heads Covers 2.5. 50 Pistons 25.5.50 Piston rods Trunk type

Connecting rods 3.5.50 Crank and Flywheel shafts 2.5.50 Intermediate shafts None

Crank shaft { Material SM-steel Tensile strength 52.6 - 54.6 kg/mm^2 / Elongation 30 -32% on 50 mm. Identification Marks No.101-2 Bnl.12.49.No.1390AS 4.1.50

Flywheel shaft, Material Flywheel fitted on crankshaft flange 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.)

These auxiliary engines have been made under Special Survey in accordance with the Rules, approved plans and Secretary's letters. The workmanship and materials are good and test sheets for the crank- and generator shafts and connecting rods are attached.

The torsional vibration characteristics were approved in the Secretary's letter "E" of the 9.7.49. for a service speed of 450 r.p.m.

The engines have been examined under full power conditions on the testbeds and found satisfactory.

The amount of Fee ... ... Kr. : 540:-: When applied for 29/2 19 51.

Travelling Expenses (if any) Kr. : 232:05 When received 19

F. Aspelin

Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRI. 26 JAN 1951

Assigned Su F.E. nicly. spk.

(The Surveyors are requested not to write on or below the space for Committees Minute.)

5m.4.48.—T. (MADE AND PRINTED IN ENGLAND)

Rpt. 13.

Date of writi

No. in Reg. Book. ..95395...

Built at ..

Owners ...

Electrical

Is vessel f

Have plans

Heating.....

has the gover

trip switch a

if not compo

arranged to

.....Negat

test for machi

of the generate

1 x 40 KW.

port side

near unprotect

injury and da

contact ...Yes

are they in acc

and oil ....Yes

material is use

semi-insulating

Is the construc

to pilot and ea

side of switches

breaker wi

and for each o

Are compartmen

ammeters 5

equaliser connec