

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 2747.

Received at London Office 31 OCT 1949

Date of writing Report 24th Oct. 1949. When handed in at Local Office 28th Oct. 1949. Port of Malmö

No. in Survey held at Malmö Date, First Survey 27th May Last Survey 18th Oct. 1949.

Reg. Book No. 7043 on the Single Twin Triple Quadruple Screw vessel M/T "VENUS"

Yard No. 345 When built 1949

By whom built Kockums Mek. V. A. B. Port belonging to Stockholm

By whom made Kockums Mek. V. A. B. Contract No. ✓ When made 1949

By whom made Åseda Contract No. ✓ When made 1949

Engine Brake Horse Power 220 M.N. as per Rule 55 Total Capacity of Generators 2 x 150 Kilowatts.

Set intended for essential services yes

OIL ENGINES, &c.—Type of Engines MAN G4 V42 2 or 4 stroke cycle 4 Single or double acting Single

Maximum pressure in cylinders 45 kg/cm² Diameter of cylinders 275 mm Length of stroke 420 mm No. of cylinders 4 No. of cranks 4

Lean indicated pressure 5.5 kg/cm² Firing order in cylinders 1-3-4-2 Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 350 mm

shut offs there a bearing between each crank yes Moment of inertia of flywheel (16 m² or Kg.-cm.²) 3506.4 kg.-cm.² Revolutions per minute 350

Flywheel dia. 1650 mm Weight 1675 kgs Means of ignition Diesel Kind of fuel used Heavy oil

Crank Shaft, dia. of journals 170 mm Crank pin dia. 170 mm Crank Webs Mid. length breadth 280 mm Thickness parallel to axis ✓

as fitted 170 " Mid. length thickness 85 " shrunk Thickness round eyehole ✓

Flywheel Shaft, diameter as per Rule Intermediate Shafts, diameter as per Rule General armature, moment of inertia (16 m² or Kg.-cm.²) 680.53 kg.-cm.²

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 yes 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 2 m³/H. to each engine

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

Scavenging Air Pumps, No. ✓ Diameter ✓ Stroke ✓ Driven by ✓

AIR RECEIVERS:—Have they been made under Survey yes State No. of Report or Certificate Got. 10121

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 Manhole

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

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 Total cubic capacity 20.4 m³ Internal diameter 1650 mm thickness 27 mm

Seamless, lap welded or riveted longitudinal joint Riveted Material SM Steel Range of tensile strength 46.5-50.6 kg./mm² Working pressure by Rules 30.1 kg./cm²

ELECTRIC GENERATORS:—Type Aseda LE 125 (Open ventilated)

Pressure of supply 230 volts. Full Load Current 652 Amperes. Direct or Alternating Current Direct

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 yes

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 ✓ and do the results comply with the requirements ✓

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

Details of driven machinery other than generator Ans. air compressors

PLANS.—Are approved plans forwarded herewith for Shafting 22.7.1948 Receivers 18.5.1946 Separate Tanks 14.7.1949

Have Torsional Vibration characteristics if applicable been approved 29.6.1948 Armature shaft Drawing No. S-11424

SPARE GEAR As per Rule supplied

Additional: 1 cylinder cover. 1 cylinder liner. 1 piston with gudgeon pin.

The foregoing is a correct description,

KOCKUMS
MEKANISKA VERKSTÄDS ABTEDELNING

Manufacturer.



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Lloyd's Register
Foundation

004205-004212-0139

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

From 27th May to 19th July, 1949.
" 17th Aug. " 18th Oct. 1949.
16

Dates of Examination of principal parts—Cylinders 27/5, 28/5-1949. Covers 9/4, 2/5, 3/5, 31/5-1949. Pistons 29/6-1949. Piston rods. ✓
Connecting rods 2/10, 9/10, 11/10, 14/10-1948. Crank and Flywheel shafts 17/3, 31/3-1949. Intermediate shafts. ✓

Crank shaft
Material S. M. Steel. Tensile strength 51.3 & 50.7 kg. mm².
Elongation 34.0 & 36.0 % Identification Marks LLOYD'S 922 BR. 17.3.49. 3144 SJ 31.3.49

Flywheel shaft, Material. ✓ Identification Marks. ✓

Identification marks on Air Receivers Nos. 1974 & 1975. Lloyd's Test 44 kg. cm². W.P. 30 kg. cm². S.B. 3.12.48.
(E.W.) SMALL RECEIVER. No 1984. TEST 60 Kgs W.P. 30 Kgs O.S. 29-12-48.

Is this machinery duplicate of a previous case? Yes. If so, state name of vessel. M/T "BEAUFIGHTER", Rpt. No. 2640.

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) See report of main engine!

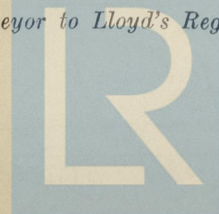
The amount of Fee ... Mr. 390.- When applied for 28.10.1949.

Travelling Expenses (if any) £ : : When received 19

Committee's Minute 25 NOV 1949

Assigned for which see R.E. Rpt.

A. Barring
Surveyor to Lloyd's Register of Shipping.



Lloyd's Register
Foundation

Rpt. 13.

Date of writing

No. in Series
Reg. Book No.

40043

Built at

Owners

Installation

Is vessel equipped

Plans, have

Heating

Prime Mover

with a trip

if not complete

in parallel

Re-gain

test for material

Position of

is the vent

damage from

port

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Are all le

bulkheads

effectivel