

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 609

Date of writing Report 29th May 1952 When handed in at Local Office 29th May 1952 Received at London Office 4-JUL 1952
 Port of K I E L
 No. in Survey held at Kiel Date, First Survey 31st May 1951 Last Survey 17th May 1952
 Reg. Book. 2328 on the Single Screw vessel m.v. "JALNA" Number of Visits 9
10380 Jupp 1000000
 Built at Newcastle By whom built Armstrong Whitworth & Co. (Shipbuilders) Ltd Yard No. 1930-9
 Owners Bulls Tankrederi A/S Port belonging to Sandefjord
 Engines made at Kiel-Friedrichsort By whom made MAK Maschinenbau Kiel A.G. Engine No. 11115 When made 1951
 Generators made at Hamburg By whom made Hans Still Motorenfabrik Generator No. 511651 When made 1951
 No. of Sets 2 B.H.P. of each Set 160 each M.N. as per Rule Capacity of each Generator 105 Kilowatts.
 Set intended for essential services yes

IL ENGINES, &c.—Type of Engines Heavy oil, Type MV 36 2 or 4 stroke cycle 4 Single or double acting S.A.
 Maximum pressure in cylinders 46 kg/cm² Diameter of cylinders 215 mm Length of stroke 360 mm No. of cylinders 4 No. of cranks 4
 as indicated pressure 6.5 kg/cm² Span of bearings (i.e., distance between inner edges of bearings in way of a crank) 246 mm
 Is there a bearing between each crank yes Moment of inertia of flywheel 15000 kg.m² GD² = 750 Revolutions per minute 500
 Flywheel dia. 1150 mm Weight 950 kg Means of ignition compression Kind of fuel used Diesel oil
 Crank Shaft, Solid forged dia. of journals as per Rule 135 mm Crank pin dia. 135 mm Crank Webs Mid. length breadth 200 mm Thickness parallel to axis —
1150 mm as fitted Mid. length thickness 62.5 mm Thickness round eye-hole —
 Flywheel Shaft, diameter as per Rule — Generator armature, moment of inertia 10000 kg.m² GD² = 76 kg/m²
 Means provided to prevent racing of the engine yes Means of lubrication forced Kind of damper if fitted —
 Are the cylinders fitted with safety valves yes Are the exhaust pipes and valves water cooled plugged with non-conducting material yes
 Cooling Water Pumps, No. and how driven one per engine Is the sea suction provided with an efficient strainer which can be cleared within the vessel yes
 Lubricating Oil Pumps, No. and size one - 2.9 m³/hr. (each engine)

Compressors, No. — No. of stages — Diameters — Stroke — Driven by —
 Suctioning Air Pumps or Blowers, No. — How driven —
RECEIVERS:—Have they been made under Survey Germanischer Lloyd Survey State No. of Report or Certificate 75073 D
other than main engines 75077 D
 Full details of safety devices yes

Are the internal surfaces of the receivers be examined and cleaned yes
 Is there a drain arrangement fitted at the lowest part of each receiver yes
 Pressure Air Receivers, No. — Cubic capacity of each — Internal diameter — thickness —
 Is the lap welded or riveted longitudinal joint — Material — Range of tensile strength — Working pressure —
 Suctioning Air Receivers, No. two Total cubic capacity 200 ltr. Internal diameter 304 mm thickness 8.5 mm
 Is the lap welded or riveted longitudinal joint seamless Material S.M. Steel Range of tensile strength — Working pressure 568 lbs/sq"

TRIC GENERATORS:—Type Ventilated, spray water proof
 Voltage of supply 115 volts. Full Load Current 870 Amperes. Direct or Alternating Current Direct Current
 Regulating current system, state the periodicity — Has the Automatic Governor been tested and found as per Rule when full load is suddenly thrown off yes
 Are the Generators, are they compounded as per Rule yes is an adjustable regulating resistance fitted in series with each shunt field yes
 Are the terminals accessible, clearly marked, and furnished with sockets yes Are they so spaced —
 Is it so arranged that they cannot be accidentally earthed, short circuited, or touched yes Are the lubricating arrangements of the generators as per Rule yes
 Are generators under 100 kw. full load rating, have the makers supplied certificates of test — and do the results comply with the requirements —
 Are generators 100 kw. or over have they been built and tested under survey yes (Rpt. 7 b herewith (2))
 Is there any driven machinery other than generator —

Are approved plans forwarded herewith for Shafting plan No. 27435
(If not, state date of approval) Receivers appr. 30.12.50 Separate Tanks —
 Additional Vibration characteristics if applicable been approved yes - subject to T.V. records
(State date of approval and name of previous duplicate case, if any) being found satisfactory Armature shaft Drawing No. —
 Are gear required by the Rules been supplied —

The foregoing is a correct description,

MAK
Maschinenbau Kiel
Aktiengesellschaft

Manufacturer.

K. Hagen



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Lloyd's Register
 Foundation

002970-002977-0200

Dates of Survey while building { During progress of work in shops - -) 31/5/51
{ During erection on board vessel - -) 31/3, 30/4, 7/4, 7/5, 8/5, 13/5, 15/5, 17/5/52
Total No. of visits nine

Dates of Examination of principal parts—Cylinders 31/5/51 Covers 31/5/51 Pistons 31/5/51 Piston rods -

Connecting rods 31/5/51 Crank and Flywheel shafts 31/5/51 Intermediate shafts -

Engine No. 14414 Engine No. 14415
Material S.M.Steel S.M.Steel Tensile strength 56.6 kg/mm² 57.7 kg/mm²
Crank shaft { Elongation 31% on 2" 30.5 % on 2" Identification Marks LLOYD'S JL 14705 18.7.49 LLOYD'S HK 131 30.4.51

Flywheel shaft, Material - Identification Marks -

Identification marks on Air Receivers Nos. 75073 & 7 7 51
Engine No. 14414 Engine No. 14415

" " Cylinder Blocks: LLOYD'S TEST LLOYD'S TEST
No. 254 5 LR 51 JB. No. 255 5 LR 51 JB.

" " Generators: LLOYD'S TEST No. 565 24.10.51 WOD. LLOYD'S TEST No. 566 24.10.51 WOD.

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 and generators have been built under Special Survey in accordance with the Rules, the Secretary's letters and approved plans, and the workmanship and materials are good. The machines have been satisfactorily installed in the above vessel, and tried under full load working conditions, and are eligible, in our opinion, to be classed LMC, subject to Torsional vibration records being submitted and found satisfactory.

F.E. Construction 2/3
The amount of Fee ... £ DM : 324.00 { When applied for 19
Travelling Expenses (if any) £ : 5.00 { When received 19

Committee's Minute
Assigned

J. Bowman + G. Schamber
Surveyor to Lloyd's Register of Shipping.

Lloyd's Register
Foundation

Rpt. 4b.

Date of wr

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Reg. Book
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