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Rpt. 4c.

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS

No. 32

Date of writing Report 8 August 1950 When handed in at Local Office 19 Port of Augsburg
 No. in Survey held at Augsburg Date, First Survey 21st of February Last Survey 30th June 1950
 Reg. Book. 9061 on the Single Twin Triple Quadruple Screw vessel M/S M.V. 'Atalanta' Number of Visits 33
 Built at Car By whom built Eisenwerk M.V. Aktiengesellschaft Yard No. 1 When built 1950
 Owners Bederi A/B Dalen Port belonging to Göteborg
 Engines made at Augsburg By whom made Maschinenfabrik Augsburg-Nürnberg Contract No. H 2960 When made 1950
 Generators made at Augsburg By whom made A.E.G. Contract No. 1 When made 1950
 No. of Sets 2 Engine Brake Horse Power 2 x 195 M.N. as per Rule 2 x 49 Total Capacity of Generators 2 x 100 Kilowatts.
 Set intended for essential services 1

OIL ENGINES, &c.—Type of Engines 2 x M.A.N. 95 V 33 2 or 4 stroke cycle 4 Single or double acting single
 Maximum pressure in cylinders 60 atms. Diameter of cylinders 220 mm Length of stroke 330 mm No. of cylinders 2 x 5 No. of cranks 2 x 5
 Mean indicated pressure 7 atms. Firing order in cylinders 1-2-4-5-3 Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 260 mm
 Is there a bearing between each crank yes Moment of inertia of flywheel (16 m² or Kg.-cm.²) 1255 kg/m² Revolutions per minute 500
 Flywheel dia. 1200 mm Weight 1200 kg Means of ignition die injection Kind of fuel used slate oil or port fuel
 Crank Shaft, dia. of journals as per Rule Crank pin dia. 130 mm Crank Webs Mid. length breadth 280 mm Thickness parallel to axis 1/4
as fitted 130 mm Mid. length thickness 89.5 mm Thickness round eye hole 1/4
 Flywheel Shaft, diameter as per Rule Intermediate Shafts, diameter as per Rule General armature, moment of inertia (16 m² or Kg.-cm.²) 1/4
as fitted as fitted

Are means provided to prevent racing of the engine when declutched yes Means of lubrication forced Kind of damper if fitted 1/4
 Are the cylinders fitted with safety valves yes Are the exhaust pipes and silencers water cooled or lagged with non-conducting material water cooled
 Cooling Water Pumps, No. 1 Is the sea suction provided with an efficient strainer which can be cleared within the vessel 1
 Lubricating Oil Pumps, No. and size 1 each 2 m³/hr. output
 Compressors, No. 2 x 1 No. of stages 2 Diameters 270/105 mm Stroke 220 Drive prop. engine
 Suctioning Air Pumps, No. 1 Diameter 1 Stroke 1 Drive 1

AIR RECEIVERS:—Have they been made under Survey 1 State No. of Report or Certificate 18.5.50
 Is each receiver, which can be isolated, fitted with a safety valve as per Rule yes
 Are the internal surfaces of the receivers be examined yes What means are provided for cleaning their inner surfaces removing of scale
 Is there a drain arrangement fitted at the lowest part of each receiver yes
 High Pressure Air Receivers, No. 1 Cubic capacity of each 125 Hrs. Internal diameter 300 mm thickness 9.0 mm
 Seamless, lap welded or riveted longitudinal joint seamless Material S.M. Steel Range of tensile strength 61 kg/mm² Working pressure by Rules 30

Starting Air Receivers, No. 1 Total cubic capacity 125 Hrs. Internal diameter 300 mm thickness 9.0 mm
 Seamless, lap welded or riveted longitudinal joint seamless Material S.M. Steel Range of tensile strength 61 kg/mm² Working pressure by Rules 30
 ELECTRIC GENERATORS:—Type 2 x A.E.S. Bremon Type A.W. 115 N° 610629/30
 Voltage of supply 230 volts. Full Load Current 440 (1100 kw) Amperes. Direct or Alternating Current direct current
 Is alternating current system, state the periodicity 1 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 1 Is an adjustable regulating resistance fitted in series with each shunt field 1
 Are all terminals accessible, clearly marked, and furnished with sockets 1 Are they so spaced 1
 Are they shielded that they cannot be accidentally earthed, short circuited, or touched 1 Are the lubricating arrangements of the generators as per Rule 1
 Do the generators are under 100 kw. full load rating, have the makers supplied certificates of test 1 and do the results comply with the requirements 1
 Do the generators are 100 kw. or over have they been built and tested under survey 1

Details of driven machinery other than generator 1 Compressor each 1
 PLANS.—Are approved plans forwarded herewith for Shafting crankshaft 27.9.48 Receivers 35.8.48 Separate Tanks 1
 (If not, state date of approval)
 Have Torsional Vibration characteristics if applicable been approved 1 Armature shaft Drawing 1
 (state date of approval)

SPARE GEAR 1 cylinder cover, 1 cylinder liner, 1 piston, 2 safety valves, 2 fuel oil valves, 5 fuel oil pressure pipes, 1 set of wheels for driving camshaft, 1 set end of wheels for driving lubricating and fuel oil pumps.

The foregoing is a correct description
 Maschinenfabrik Augsburg-Nürnberg A.G.
 H. A. Müller i.V. v. Hammer Manufacturer.



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002515-002521-0253

Dates of Survey while building
 During progress of work in shops - 1950: Feb. 31. 28. March 2. 7. 9. 13. 16. 21. 22. 27. 28. 29. 30. 31. April 4. 13. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. May 4. 12. 15. 25. 26. 30. June 7. 12. 14. 16. 21. 29. 30.
 During erection on board vessel - - -
 Total No. of visits. 30.

Dates of Examination of principal parts—Cylinders. 21.3.50 Covers. 16.3.50 Pistons. 26.4.50 Piston rods. 26.4.50
 Connecting rods. 26.4.50 Crank and Flywheel shafts. 18.4.50 + 12.6.50 Intermediate shafts. 26.4.50

Crank shaft Material. Siemens-Martin-Steel
 On 50/70 mm 29.8/26.1 — 2060 31.0/27.0
 Elongation. 2059 = 31.4/27.1 — 30.6/26.4
 Tensile strength. 2059 = 55.6/55.9 — 2060 = 60.2/58.7 kg/cm²
 Identification Marks. 2059 = Lloyd's 44958. HK5. 18.4.50
 2060 = " 42628. HK5. 18.4.50

Identification Marks. Lloyd's 2059/60. 2886 B. HK5. 12.6.50

Identification marks on Air Receiver. Port Augsburg. No L.R. 10185. Test Press. 60 kg/cm²
 Working Press. 30 kg/cm² HK5 12.5.50

Is this machinery duplicate of a previous case. / If so, state name of vessel. / Standard Type of M.P.N's Aux. Engine

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) These heavy oil auxiliary engines have been constructed under special survey in accordance with the Society's Rules and Regulations, as well as with the approved plans and instructions thereto.

The material used in the construction is good and the workmanship was found to be satisfactory. On makers test bed, these auxiliary engines have been tested under full- and partial loads with satisfactory results.

In my opinion, the vessel for which these heavy oil auxiliary are intended will be eligible for the notation of **✱ L.M.C** (with date) when the whole machinery has been satisfactorily fitted aboard and tried under full working conditions.

Fee:

Survey Fee = 2 x 49 MN = D.M. 527. 24

2 x Bed Test Trial = " 120. 00

2 x Testing crankshafts = " 80. 00

Testing 2 Air Compressors = " 300. 00

Testing 1 Air Receiver = 40. 00

Insp. + test 2 found plates = 80. 00

Testing spar parts = 69. 00

Testing two couplings = 20. 00

Rep. = 1236.24 } Total = D.M. 1270.00

The amount of Fee ... £

When applied for 19

Travelling Expenses (if any) £

When received left 19 50

Committee's Minute

Assigned

Surveyor to Lloyd's Register of Shipping.



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