

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 538

Rpt. 4c.

Received at London Office

4 OCT 1955

Date of writing Report 12th July 1955 When handed in at Local Office 1955 Port of Augsburg, Moritzplatz 4
 No. in Survey held at Munich Date, First Survey 4th July Last Survey 12th July, 1955
 Reg. Book. "Miliara" Number of Visits 2
 on the Single Screw vessel Tons { Gross - Net -
 Built at Bremen-Hemelingen By whom built Messrs. Rolandwerft G.m.b.H. Yard No. 857 When built 1955
 Owners - Port belonging to -
 Oil Engines made at Munich By whom made Messrs. Süddeutsche Bremsen A.G. Engine No. 93 532 When made 1955
 Generators made at - By whom made - Generator No. - When made -
 No. of Sets 1 B.H.P. of each Set 150 M.N. of each Set as per Rule - Capacity of each Generator - Kilowatts -
 Is Set intended for essential services -

OIL ENGINES, &c.—Type of Engines heavy oil engine RHS 518 S 2 or 4 stroke cycle 4 Single or double acting single
 Maximum pressure in cylinders 60 kg/cm² Diameter of cylinders 140 mm Length of stroke 180 mm No. of cylinders 6 No. of cranks 6
 Mean indicated pressure 7.7 kg/cm² Span of bearings (i.e., distance between inner edges of bearings in way of a crank) 136 mm
 Is there a bearing between each crank yes Moment of inertia of flywheel (16 m² or Kg.-cm.²) 31 kgm² Revolutions per minute 1150
 Flywheel dia. 590 x 105 mm Weight 160 kgs. Means of ignition pre-chamber Kind of fuel used diesel fuel oil
 Crank Shaft, Solid forged dia. of journals 115 mm Crank pin dia. 100 mm Crank Webs Mid. length breadth 152 mm Thickness parallel to axis -
Semi-built as per Rule shrunk Mid. length thickness 32 mm Thickness round eyeballs -
All-built as fitted
 Flywheel Shaft, diameter as per Rule Generator armature, moment of inertia (16 m² or Kg.-cm.²) - spring loaded fiction damper
as fitted

Are 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 no Are the exhaust pipes and silencers water cooled or lagged with non-conducting material water cooled
 Cooling Water Pumps, No. and how driven 1 toothed wheel pump for sea water 10 m³/h Is the sea suction provided with an efficient strainer which can be cleared within the vessel -
1 rotary pp. for fresh-water 5.2 m³/h
 Lubricating Oil Pumps, No. and size 1 toothed wheel pump 3.7 m³/h

Air Compressors, No. - No. of stages - Diameters - Stroke - Driven by -
 Scavenging Air Pumps or Blowers, No. - How driven - State No. of Report or Certificate -

AIR RECEIVERS:—Have they been made under Survey -

(other than main engines)

State full details of safety devices -

Can the internal surfaces of the receivers be examined and cleaned -

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

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

Seamless, lap welded or riveted longitudinal joint - Material - Range of tensile strength - Working pressure -

Starting Air Receivers, No. - Total cubic capacity - Internal diameter - thickness -

Seamless, lap welded or riveted longitudinal joint - Material - Range of tensile strength - Working pressure -

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 - is an adjustable regulating resistance fitted in series with each shunt field -

Generators, are they compounded as per Rule - Are they so spaced -

Are all terminals accessible, clearly marked, and furnished with sockets -

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 -

PLANS.—Are approved plans forwarded herewith for Shafting no Receivers - Separate Tanks -

Have Torsional Vibration characteristics if applicable been approved yes London letter 6.9.55 Armature shaft Drawing No. -

Has the spare gear required by the Rules been supplied no

The foregoing is a correct description,

SÜDDEUTSCHE BREMSEN AG! M ü n c h e n

Manufacturer.

AGE 65



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Dates of Survey while building { During progress of work in shops - - 1955: July 4th; 12th;
During erection on board vessel - - -
Total No. of visits 2

Dates of Examination of principal parts—Cylinders 4.7.55 Covers 4.7.55 Pistons 4.7.55 Piston rods -

Connecting rods 15.3.55 H.S. Crank and Flywheel shafts 26.4.55 Intermediate shafts -

Crank shaft { Material S.M. Steel Tensile strength 84.7 kg/mm²
Elongation 18.0 % on 5 x d Identification Marks WLOYD'S AUG 7651
W.S.E. 26.4.55
Identification Marks 526 901/201 -

Flywheel shaft, Material - Identification Marks -

Identification marks on Air Receivers -

Is this machinery duplicate of a previous case - If so, state name of vessel -

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

This heavy oil auxiliary engine has been constructed under special survey in accordance with the requirements of the Rules and Regulations of this Society and otherwise with the approved plans.

The material used in the construction is good and the workmanship was found to be satisfactory.

The engine has been tested running on makers' test bed under full-, over-, and partial loads with satisfactory results.

In my opinion the vessel for which this engine is intended will be eligible for the notation

✱ L.M.C. (with date) when the whole machinery has been satisfactorily fitted aboard the vessel and has been tried under full working conditions.

The amount of Fee ... £ DM 200.-
Test bed trial DM 40.-
Travelling Expenses (if any) £ DM 25.-
DM 265.-
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When applied for 19
When received 19

Committee's Minute

TUESDAY 10 JUL 1956

Assigned

See Rpt. 4c.

Surveyor to Lloyd's Register of Shipping.



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