

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

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Date of writing Report 20th Jan 19 54 When handed in at Local Office 19 Port of Augsburg, Moritzplatz 4

No. in Survey held at Munich Date, First Survey 13th November, Last Survey 10th Dec. 19 53

Reg. Book. Single on the Twin Triple Quadruple Screw vessel "ALDERAMINE" Number of Visits 3

Built at Trieste By whom built Messrs. Cantieri Riuniti dell' Adriatico, Ufficio Acquisti Yard No. -.- When built -.-

Owners. -.- Port belonging to -.-

Oil Engines made at Munich By whom made Messrs. Süddeutsche Bremsen A.G. Engine No. 92 035 When made 1953

Generators made at -.- By whom made -.- Generator No. -.- When made -.-

No. of Sets 1 B.H.P. of each Set 57 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 RHS 518 D 2 or 4 stroke cycle 4 Single or double acting single

Maximum pressure in cylinders 58 kg/cm² Diameter of cylinders 140 mm Length of stroke 180 mm No. of cylinders 3 No. of cranks 3

Mean indicated pressure 6.5 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) 85 kgm² Revolutions per minute 1000

Flywheel dia. 700 x 180 mm Weight 270 kg Means of ignition pre-chamber Kind of fuel used gas oil

Crank Shaft, Solid forged dia. of journals as per Rule -.- Crank pin dia. 100 mm Crank Webs Mid. length breadth 152 mm Thickness parallel to axis -.-

Flywheel Shaft, diameter as fitted -.- Generator armature, moment of inertia (16 m² or Kg.-cm.²) -.-

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 (by V-belt) Is the sea suction provided with an efficient strainer which can be cleared within the vessel -.-

Lubricating Oil Pumps, No. and size 1 attached pump, capacity 45 ltrs./min.

Air Compressors, No. -.- No. of stages -.- Diameters -.- Stroke -.- Driven by -.-

Scavenging Air Pumps or Blowers, No. -.- How driven -.-

AIR RECEIVERS:—Have they been made under Survey yes State No. of Report or Certificate 8471

(other than main engines) State full details of safety devices safety valve

Can 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

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. 1 Total cubic capacity 40 ltrs. Internal diameter 192 mm thickness 5.5 mm

Seamless, lap welded or riveted longitudinal joint seamless Material S.M. Steel Range of tensile strength 58.2 Working pressure 40 atm.

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 yes Generators, are they compounded as per Rule -.- is an adjustable regulating resistance fitted in series with each shunt field -.-

Are all terminals accessible, clearly marked, and furnished with sockets -.- Are they so spaced 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 approv. 2.2.51 Receivers 2.2.51 Separate Tanks -.-

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

Has the spare gear required by the Rules been supplied yes

The foregoing is a correct description,

SÜDDEUTSCHE BREMSEN A.G. Manufacturer.



112 836-012 844-0098

40 288.

Dates of Survey while building { During progress of work in shops - - } 1953: Nov. 13; Dec. 8, 10.; { During erection on board vessel - - }
Total No. of visits 3

Dates of Examination of principal parts—Cylinders 13.11.53 Covers 13.11.53 Pistons -.- Piston rods -.-
Connecting rods 13.11.53 Crank and Flywheel shafts 4.7.52 Intermediate shafts -.-

Crank shaft { Material S.M. Steel Tensile strength 84,0 kg/mm²
Elongation 17,8 % on 50 mm Identification Marks LLOYDS 3231/366 284703
H.K.S. 4.7.52
Flywheel shaft, Material -.- Identification Marks -.-

Identification marks on Air Receivers No. 155/2
LLOYD'S TEST
T.P. 1140 lb.
W.P. 570 lb.
M.S.A. 19.9.53 DSF

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 approved plans, the Secretary's letters and instructions thereto. 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 good results.
In our 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.

4m,582-T. (MADE AND PRINTED IN ENGLAND)
(The Surveyors are requested not to write on or below the space for Committee's Minute.)

The amount of Fee ... for fees please
... £ see yellow fee slip LR/R { When applied for 19
Travelling Expenses (if any) £ : : { When received 19

Committee's Minute FRIDAY 11 FEB 1955
Assigned See Rpt 4b

Surveyor to Lloyd's Register of Shipping.
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