

Rpt. 4c.

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 20175
3-SEP-1954

Received at London Office

Date of writing Report 24-7-54 19 When handed in at Local Office 26-7-54 19 Port of GENOA

No. in Survey held at GENOA Date, First Survey 12-2-53 Last Survey 16-7-54 19
Reg. Book. 361435 on the Single Triple Quadruple Screw vessel "GIUSEPPE GIULIETTI" Tons Gross 17519 Net 9801

Built at GENOA - SESTRI By whom built S.A. ANSALDO - CANTIERI NAVALI Yard No. 1486 When built 1954

Owners "GARIBOLDI" Soc. Coop. di Nav. A RESA. LTOA. Port belonging to GENOA

Oil Engines made at GENOA - SAMPIERDARENA By whom made S.A. ANSALDO - STABIL. MECCANICO Engines No. 21316142 21316143 When made 1954

Generators made at GENOA - SESTRI By whom made ANSALDO - SAN GIORGIO - STABIL. ELETTRO MECCANICI RIUNITI. Generator No. 5414 5415 When made 1954

No. of Sets TWO B.H.P. of each Set 150 M.N. of each Set as per Rule Capacity of each Generator 100 Kilowatts

Is Set intended for essential services YES

OIL ENGINES, &c. Type of Engines ANSALDO Q2131/6 - AIRLESS INJECTION 2 or 4 stroke cycle 4 Single or double acting SINGLE

Maximum pressure in cylinders 60 Kg/cm² Diameter of cylinders 215 mm Length of stroke 310 mm No. of cylinders 6 No. of cranks 6Mean indicated pressure 6.4 Kg/cm² Span of bearings (i.e., distance between inner edges of bearings in way of a crank) 264 mmIs there a bearing between each crank YES Moment of inertia of flywheel 2356 Kg.cm.² 16.3 Kg.cm.² Revolutions per minute 400

Flywheel dia. 1250 mm Weight 955 Kg. Means of ignition COMPRESSION Kind of fuel used DIESEL OIL

Crank Shaft, Solid forged dia. of journals 130 mm Crank pin dia 130 mm Crank Webs Mid. length breadth 200 mm Thickness parallel to axis 64 mm Thickness round eye holes 64 mm

Flywheel Shaft, diameter as per Rule 25 approved as fitted 130 mm Generator armature, moment of inertia 499 Kg.cm.²

Are means provided to prevent racing of the engine GOVERNOR Means of lubrication FORCED Kind of damper if fitted FLEXIBLE COUPLING.

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. and how driven ONE - 100 mm driven by 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 - ROTARY TYPE: 2280 lit/h. driven by engine

Air Compressors, No. ONE No. of stages TWO Diameters 82/35 mm Stroke 70 mm Driven by HAND.

Scavenging Air Pumps or Blowers, No. YES How driven YES State No. of Report or Certificate 21/9/54

AIR RECEIVERS: Have they been made under Survey YES

(other than main engines) State full details of safety devices SPRING LOADED 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. YES Cubic capacity of each YES Internal diameter YES thickness YES

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

Starting Air Receivers, No. TWO YES Total cubic capacity 320 litres Internal diameter 351 mm thickness 8.5 mm

Seamless, lap welded or riveted longitudinal joint SEAMLESS Material S.A. STEEL Range of tensile strength 55/65 Kg/mm² Working pressure 35 Kg/cm²

ELECTRIC GENERATORS: Type PROTECTED SELF-VENTILATED

Pressure of supply 450 volts Full Load Current 850 Amperes Direct or Alternating Current ALTERNATING

If alternating current system, state the periodicity 60 cycles 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 Are they so spaced YES

Are all terminals accessible, clearly marked, and furnished with sockets YES Are the lubricating arrangements of the generators as per Rule 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 YES and do the results comply with the requirements YES

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

Details of driven machinery other than generator YES

PLANS: Are approved plans forwarded herewith for Shafting 27-11-52 Receivers 10-6-47 Separate Tanks YES

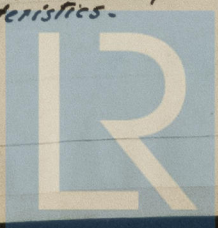
Have Torsional Vibration characteristics if applicable been approved 30-4-53 5/5/53 Armature shaft Drawing No. ANSALDO - SAN GIORGIO 2619230

Has the spare gear required by the Rules been supplied YES

ANSALDO S. A.
STABILIMENTO MECCANICO
Un Condirettore

The foregoing is a correct description, and the particulars of the installation as fitted are as approved for torsional vibration characteristics.

Manufacturer.



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Dates of Survey while building
During progress of work in shops - FROM 12-2-53 To 1-2-54
During erection on board vessel - FROM 13-3-54 To 16-7-54
Total No. of visits 22

Dates of Examination of principal parts - Cylinders 12-2-53 to 9-7-53 Covers 26-2-53 to 9-3-53 Pistons 25-6-53 Piston rods ✓

Connecting rods 25-6-53 Crank and Flywheel shafts 25-6-53 Intermediate shafts ✓

Crank shaft Material S.M. STEEL Tensile strength $\geq 50 \text{ Kg/mm}^2$
Elongation $\geq 25\%$ Identification Marks LLOYD'S S. 2250 AG. 29-4-53 LLOYD'S S. 2250 AG. 29-4-53

Flywheel shaft, Material ✓ Identification Marks ✓

Identification marks on Air Receivers 2-80317, 2-80324
LLOYD'S TEST
W.P. 35 Kg/cm²
G.M. 16-1-53

Is this machinery duplicate of a previous case. YES If so, state name of vessel C.R.D.A YARA N° 1775. SEE GENOA REPORT N° 19390

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) THESE SETS HAVE BEEN CONSTRUCTED UNDER SPECIAL SURVEY OF TESTED MATERIALS AND ARE IN ACCORDANCE WITH THE APPROVED PLANS, SECRETARY'S LETTERS AND RULE REQUIREMENTS. THE TORSIONAL VIBRATION CHARACTERISTICS OF THE COMPLETE DYNAMIC SYSTEM HAVE BEEN APPROVED FOR A SERVICE SPEED OF 400 R.p.m. THE MATERIALS AND WORKMANSHIP ARE GOOD.

THESE SETS HAVE BEEN SATISFACTORILY FITTED ON BOARD, TRIED UNDER WORKING CONDITION AT FULL POWER WITH SATISFACTORY RESULTS.

FIRST ENTRY FEE: £4. 28.000=
LESS 15% = £4. 66.300.=
The amount of Fee £4. 1.989.= :
Travelling Expenses (if any) £4. 8. 011.= :
REV. TAX. - £4. 2.289.=

When applied for 22/3/ 1954

When received 19

FRIDAY 1 OCT 1954

Committee's Minute

Assigned See Rpt. 4.

Surveyor to Lloyd's Register of Shipping.



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