

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 21286Received at London Office 9-FEB-1956

of writing Report 29-1-56 When handed in at Local Office 3/2/1956 Port of GENOA
 in Survey held at GENOA Date, First Survey 16-6-55 Last Survey 17-1-56 19
 Book. Single on the Triple Screw vessel "MIRAFLORES" Tons Gross 20776 Net ✓
 at GENOA-SESTRI By whom built S.A. ANSALDO-CANTIERI NAVALI Yard No. 1499 When built 1956
 engines made at GENOA-SAMPIERDARA By whom made S.A. ANSALDO-STABIL MECCAN. Engine No. 21316160 When made 1955
 rators made at MONFALCONE By whom made C.R.D.A. OFFICINE ELETTROMECC. Generator No. 132365 When made 1955
 f Sets ONE B.H.P. of each Set 180 M.N. of each Set as per Rule ✓ Capacity of each Generator 120 Kilowatts
 t intended for essential services YES

ENGINES, &c.—Type of Engines ANSALDO Q2131/6 - AIRLESS INJECTION 3 or 4 stroke cycle 4 Single or double acting SINGLE
 mum pressure in cylinders 60 Kg/cm² Diameter of cylinders 215 mm Length of stroke 310 mm No. of cylinders 6 No. of cranks 6
 indicated pressure 6.4 Kg/cm² Span of bearings (i.e., distance between inner edges of bearings in way of a crank) 264 mm
 ere a bearing between each crank YES Moment of inertia of flywheel (18 m² or Kg-cm²) 920 Kg.m² Revolutions per minute 400
 wheel dia. 1250 mm Weight 955 Kg. Means of ignition COMPRESSION Kind of fuel used DIESEL OIL
 nk Shaft, { Solid forged as per Rule as approved dia. of journals 130 mm Crank pin dia. 130 mm Crank Webs { Mid. length breadth 200 mm Thickness parallel to axis ✓
 { Semi-built as fitted 130 mm { Mid. length thickness 64 mm Thickness round eye hole ✓
 { All-built
 wheel Shaft, diameter as per Rule as approved Generator armature, moment of inertia (18 m² or Kg-cm²) 373 Kg-cm²

means provided to prevent racing of the engine GOVERNOR Means of lubrication FORCED Kind of damper if fitted FLEXIBLE COUPLING
 cylinders fitted with safety valves YES Are the exhaust pipes and silencers water cooled or lagged with non-conducting material LAGGED
 Water Pumps, No. and how driven ONE: 100 mm Is the sea suction provided with an efficient strainer which can be cleared within the vessel YES
 uch by engine ONE: 52 mm
 eating Oil Pumps, No. and size ONE - ROTARY - GEAR TYPE: 2280 lit/h.
 Compressors, No. ONE No. of stages TWO Diameters 82/35 mm Stroke 70 mm Driven by HAND
 renging Air Pumps or Blowers, No. ✓ How driven ✓

RECEIVERS:—Have they been made under Survey YES State No. of Report or Certificate COPY of certificate to be here with other checked.
 e full details of safety devices SPRING LOADED SAFETY VALVE

the internal surfaces of the receivers be examined and cleaned YES
 here a drain arrangement fitted at the lowest part of each receiver YES
 h Pressure Air Receivers, No. ✓ Cubic capacity of each ✓ Internal diameter ✓ thickness ✓
 mless, lap welded or riveted longitudinal joint ✓ Material ✓ Range of tensile strength ✓ Working pressure ✓
 rting Air Receivers, No. TWO Total cubic capacity 320 litres Internal diameter 351 mm thickness 8.5 mm
 mless, lap welded or riveted longitudinal joint SEAMLESS Material S.M. STEEL Range of tensile strength 45/55 Kg/mm² Working pressure 35 Kg/cm²

ELECTRIC GENERATORS:—Type C.R.D.A. PROTECTED - SELF VENTILATED
 essure of supply 230 volts. Full Load Current 522 Amperes. Direct or Alternating Current DIRECT
 alternating current system, state the periodicity ✓ 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 YES is an adjustable regulating resistance fitted in series with each shunt field YES
 e all terminals accessible, clearly marked, and furnished with sockets YES Are they so spaced
 shielded that they cannot be accidentally earthed, short circuited, or touched YES Are the lubricating arrangements of the generators as per Rule YES
 the generators are under 100 kw. full load rating, have the makers supplied certificates of test ✓ and do the results comply with the requirements ✓
 the generators are 100 kw. or over have they been built and tested under survey YES
 tails of driven machinery other than generator ✓

ANS.—Are approved plans forwarded herewith for Shafting 27-11-52 Receivers 10-6-47 Separate Tanks ✓
 ve Torsional Vibration characteristics if applicable been approved 29-8-55 Armature shaft Drawing No. C.R.D.A. N° 6597/15
 s the spare gear required by the Rules been supplied YES

ANSALDO S.A.
STABILIMENTO MECCANICO

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

Manufacturer.

014531-014544-0166

Lloyd's Register
Foundation

Dates of Survey while building { During progress of work in shops - - From 16-6-55 To 3-10-55
During erection on board vessel - - From 3-11-55 To 17-1-56
Total No. of visits 11

Dates of Examination of principal parts - Cylinders 16-6-55 Covers 21-6-55 Pistons 4-7-55 Piston rods ✓
Connecting rods 4-7-55 Crank and Flywheel shafts 14-7-55 Intermediate shafts ✓

Crank shaft { Material S.M. STEEL Tensile strength $\geq 50 \text{ kg/mm}^2$
Elongation $\geq 25\%$ Identification Marks LLOYD'S GEN 53546 AG 30-6-55

Flywheel shaft, Material ✓ Identification Marks ✓

Identification marks on Air Receivers 2-283334, 2-283336
LLOYD'S TEST-GEN
70 kg/cm²
W.P. 35 kg/cm²
G.M. 8-7-55

Is this machinery duplicate of a previous case. YES If so, state name of vessel "ARCEA PRIMA" SEE GENOA REP. N° 20595

GENERAL REMARKS (State quality of workmanship, opinions as to class, &c.) THIS ENGINE HAS BEEN CONSTRUCTED UNDER SPECIAL SURVEY OF TESTED MATERIALS AND IS IN ACCORDANCE WITH THE APPROVED PLANS, SECRETARY'S LETTERS AND RULE REQUIREMENTS. THE MATERIALS AND WORKMANSHIP ARE GOOD.

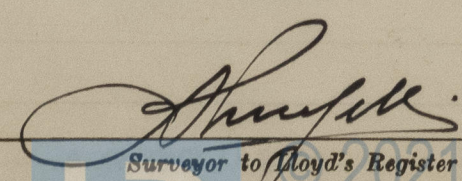
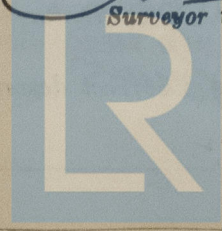
THIS SET HAS BEEN SATISFACTORILY FITTED ON BOARD, TRIED UNDER WORKING CONDITION AT FULL POWER WITH SATISFACTORY RESULTS.

N.B. THIS OIL ENGINE IS PROVIDED WITH CRANKCASE EXPLOSION RELIEF DEVICES.

4m.532-T. (THIS AND PREVIOUS MINUTE ARE TO BE USED FOR COMMITTEE'S MINUTE.)
The Surveyors are requested not to write on or below the space for Committee's Minute.

FIRST ENTRY FEE: £ 48.000 = £ 48.000
The amount of Fee ... £ 48.000 =
CAR FUND --- £ 815 =
Travelling Expenses (if any) £ 5384 =
REV. TAX --- £ 1410 =
When applied for 19/12/1955
When received 19

Committee's Minute FRIDAY 16 MAR 1956
Assigned Su Rpt. 4


Surveyor to Lloyd's Register of Shipping.
 Lloyd's Register Foundation