

Rpt. 4c.

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 20595

Date of writing Report 16-2-55 19 When handed in at Local Office 7/3/1955 Port of GENOA Received at London Office 11 MAR 1955

No. in Survey held at GENOA Date, First Survey 15-2-54 Last Survey 8-2-55 19

Reg. Book. GENOA Number of Visits 10

☒ on the Single Screw vessel "ARGEA PRIMA" Tons Gross 207.71 Net 121.72

Built at GENOA - SESTRI By whom built S.A. ANSALDO - CANTIERI NAVALI Yard No. 1494 When built 1955

Owners "ARGEA" COMP. di NAVIGAZIONE S.p.A. Port belonging to PALERMO

Oil Engines made at GENOA - SAMPIERDARENA By whom made S.A. ANSALDO - STABIL. MECCANICO Engine No. 24316147 When made 1954

Generators made at MONFALCONE By whom made C.R.D.A. OFFICINE ELETTROMECC. Generator No. 130697 When made 1954

No. of Sets ONE B.H.P. of each Set 180 M.N. of each Set as per Rule ☒ Capacity of each Generator 120 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 6

Mean indicated pressure 6.4 Kg/cm² Span of bearings (i.e., distance between inner edges of bearings in way of a crank) 264 mm

Is there a bearing between each crank YES Moment of inertia of flywheel 2350 Kg.cm² Revolutions per minute 430

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 shrunk

Flywheel Shaft, diameter 130 mm Generator armature, moment of inertia 373 Kg.cm²

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 Pump, No. and how driven ONE - driven by engine Is the sea suction provided with an efficient strainer which can be cleared within the vessel YES

Lubricating Oil Pump, No. and size ONE - driven by engine ROTARY - GEAR TYPE: 2280 l/h.

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

AIR RECEIVERS:—Have they been made under Survey YES State No. of Report or Certificate Copy of certificate herewith attached

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 Total cubic capacity 320 litres Internal diameter 351 mm thickness 8.5 mm

Seamless, lap welded or riveted longitudinal joint SEAMLESS Material S.M. STEEL Range of tensile strength 50/60 Kg/mm² Working pressure 35 Kg/cm²

ELECTRIC GENERATORS:—Type C.R.D.A. PROTECTED SELF-VENTILATED

Pressure of supply 230 volts. Full Load Current 522 Amperes. Direct or Alternating Current DIRECT

If alternating current system, state the periodicity YES 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 is an adjustable regulating resistance fitted in series with each shunt field YES

Are all terminals accessible, clearly marked, and furnished with sockets YES Are they so spaced 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 27-7-52 Receivers 10-6-47 Separate Tanks YES

Have Torsional Vibration characteristics if applicable been approved 15-10-53 Armature shaft Drawing No. C.R.D.A. No 6591/15

Has the spare gear required by the Rules been supplied YES 16/18/15 1000 RPM

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.

Dates of Survey while building
During progress of work in shops - FROM 15-3-54 To 30-9-54
During erection on board vessel - FROM 2-11-54 To 8-2-55
Total No. of visits 10

Dates of Examination of principal parts - Cylinders 15/29-3-54 Covers 18-3-54 Pistons 6-5-54 Piston rods 6-5-54
Connecting rods 6-5-54 Crank and Flywheel shafts 22-3-54 Intermediate shafts 22-3-54

Crank shaft Material S.M. STEEL Tensile strength > 50 Kg/mm²
Elongation ≥ 25% Identification Marks LLOYD'S-GEN S 2502 A.G. 22-3-54

Flywheel shaft, Material Identification Marks 2-80319 2-80323
Identification marks on Air Receivers 2-80319 2-80323
LLOYD'S TEST-GEN 70 Kg/cm² 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 "MINA d'AMICO" SEE GENOA REPORT N° 20088

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

F.E. FEE: 46 H8.000 = 200 15%
The amount of Fee ... = 46 H8.000 =
CAR FUND --- 24 1.224 =
Travelling Expenses (if any) \$1. : 4926 =
REV. TAX --- 24 1410 =

Committee's Minute

Assigned See Rpt. 4.

TUESDAY 26 APR 1955

[Signature]
Surveyor to Lloyd's Register of Shipping.