

# REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 19390

Received at London Office

6 JUL 1953

Survey Report 20-6-53 19 When handed in at Local Office 19 Port of GENOA

Survey held at GENOA Date, First Survey 22-1-53 Last Survey 15-6-53 19

on the TWIN Triple Screw vessel STEAM TANKER "MIRELLA D'AMICA" Number of visits 6

MONFALCONE MESSRS. C.R.D.A. YARD N°1775 Tons Gross Net

By whom built CANTIERI RIUNITI DELL'ADRIATICO Yard No. 1775 When built 1953

Port belonging to

es made at GENOA-SAMPIERDARENA By whom made S.A. ANSALDO-STABILIM. MECCANICO Engine No. 21316139 When made 1953

s made at MONFALCONE By whom made C.R.D.A. OFFICINE ELETTROMECC. Generator No. 129242 When made 1953

ts ONE B.H.P. of each Set 150 M.N. as per Rule Capacity of each Generator 100 Kilowatts.

ended for essential services

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

pressure in cylinders 60 Kg/cm<sup>2</sup> Diameter of cylinders 245 mm Length of stroke 310 mm No. of cylinders 6 No. of cranks 6

icated 6.4 Kg/cm<sup>2</sup> Span of bearings (i.e., distance between inner edges of bearings in way of a crank) 264 mm

bearing between each crank YES Moment of inertia of flywheel (16 m<sup>2</sup> or Kg.-cm.<sup>2</sup>) 2350 Revolutions per minute 4000

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

Solid forged as per Rule dia. of journals 130 mm Crank pin dia 130 mm Crank Webs Mid. length breadth 300 mm Thickness parallel to axis

Shaft, diameter as fitted 130 mm Generator armature moment of inertia (16 m<sup>2</sup> or Kg.-cm.<sup>2</sup>) 373 Kg.-cm.<sup>2</sup>

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

linders fitted with safety valves YES Are the exhaust pipes and silencers water cooled or lagged with non-conducting material LAGGED

Water Pump, No. and how driven ONE 100 mm Stroke 152 Is the sea suction provided with an efficient strainer which can be cleared within the vessel

Oil Pumps, No. and size ONE - ROTARY TYPE: 2280 lit/h.

essors, No. No. of stages Diameters Stroke Driven by

g Air Pumps or Blowers, No. How driven

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

details of safety devices SPRING LOADED SAFETY VALVE

internal surfaces of the receivers be examined and cleaned YES

drain arrangement fitted at the lowest part of each receiver YES

ssure Air Receivers, No. Cubic capacity of each Internal diameter thickness

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

Air Receivers, No. ONE Total cubic capacity 150 litres Internal diameter 351 mm thickness 8.5 mm

lap welded or riveted longitudinal joint SEAMLESS Material S.M. STEEL Range of tensile strength 55.65 Kg/mm<sup>2</sup> Working pressure 35 Kg/cm<sup>2</sup>

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

of supply 220 volts Full Load Current 455 Amperes Direct or Alternating Current DIRECT

ting current system, state the periodicity YES Has the Automatic Governor been tested and found as per Rule when full load is suddenly thrown

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

rminals accessible, clearly marked, and furnished with sockets YES Are they so spaced

d that they cannot be accidentally earthed, short circuited, or touched YES Are the lubricating arrangements of the generators as per Rule YES

erators are under 100 kw. full load rating, have the makers supplied certificates of test YES and do the results comply with the requirements YES

erators are 100 kw. or over have they been built and tested under survey YES

driven machinery other than generator

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

ional Vibration characteristics if applicable been approved 16-2-53 Armature shaft Drawing No. C.R.D.A. N° 659/15

pare gear required by the Rules been supplied

TO BE SUPPLIED AT TRIESTE

ANSALDO S.A. STABILIM. MECCANICO

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

Manufacturer.

Lloyd's Register Foundation

011962-011473-0044



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Dates of Survey while building  
During progress of work in shops - -  
During erection on board vessel - -  
Total No. of visits

FROM 22-1-53 TO 15-6-53

Dates of Examination of principal parts  
Cylinders 26-1-53 Covers 29-1-53 Pistons 2-2-53 Piston rods  
Connecting rods 2-2-53 Crank and Flywheel shafts 22-2-53 Intermediate shafts  
Crank shaft  
Material S.M. STEEL Tensile strength  $\geq 50 \text{ Kg/mm}^2$   
Elongation  $\geq 24\%$  Identification Marks  
Flywheel shaft, Material Identification Marks  
Identification marks on Air Receivers

No 2-80344  
24015.5 test  
to Kagem  
W.P. 35 Kagem  
B.M. 16-1-53

Is this machinery duplicate of a previous case No If so, state name of vessel

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 TORSIONAL VIBRATION CHARACTER OF THE COMPLETE DYNAMIC SYSTEM HAVE BEEN APPROVED FOR A SERVICE SPEED 400 R.P.M. THE MATERIALS AND WORKMANSHIP ARE GOOD. THE SET HAS BEEN TRIED UNDER WORKING CONDITION ON THE BENCH WITH SATISFACTORY RESULTS.

THIS SET HAS NOW BEEN DESPATCHED TO MONFALCONE TO BE FITTED ON BOARD MESSRS. CANTIERI RIUNITI DELL'ADRIATICO YARD N° 1745.

N.B. COPY OF THIS REPORT HAS BEEN FORWARDED TO TRIESTE SURVEYORS FOR THE INFORMATION.

Committee's Minute

Assigned

The amount of Fee 4139000  
CAR FUND - - - 41  
Travelling Expenses (if any) 41  
REV. TAX - - - 41

When applied for 1/2/ 1953  
When received 19

TUESDAY 16 MAR 1954

See Rpt. 4a

Surveyor to Lloyd's Register of Shipping

Lloyd's Register Foundation