

Rpt. 4c.

## REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 21512

Received at London Office 22 MAY 1956  
GENOA

Date of writing Report 23/4/1956 When handed in at Local Office 21/5/56 Port of GENOA

No. in Survey held at GENOA and LA SPEZIA Date, First Survey 10/3/55 Last Survey 10/4/1956  
Reg. Book. Number of Visits 30 Gross 11249

on the Single Triple Quadruple Screw vessel "GIACINTO MOTTA" Tons Net -

Built at La Spezia-Muggiano By whom built S.A. ANSALDO, Cantiere di Muggiano Yard No. 1504 When built 1956

Owners Carbogas, Società di Navigazione S.p.A. Port belonging to Palermo

Oil Engines made at Genoa-Sampierdarena By whom made S.A. Ansaldo, Stabilimento Meccanico Engine No. 2654248/49/50/51 When made 1955

Generators made at Genoa-Campi By whom made ANSALDO-San Giorgio, Stabilimenti Elettromeccanici Riuniti. Generator No. 15749/50/51/60 When made 1955

No. of Sets four B.H.P. of each Set 200 M.N. of each Set as per Rule Capacity of each Generator 125 Kilowatts

Is Set intended for essential services yes

OIL ENGINES, &amp;c.—Type of Engines ANSALDO Q265/4 - airless injection 2 or 4 stroke cycle 4 Single or double acting single

Maximum pressure in cylinders 55 kg/cm<sup>2</sup> Diameter of cylinders 265mm Length of stroke 410mm No. of cylinders 4 No. of cranks 4Mean indicated pressure 6,52 Kg/cm<sup>2</sup> Span of bearings (i.e., distance between inner edges of bearings in way of a crank) 348 mmIs there a bearing between each crank yes Moment of inertia of flywheel (kg-m<sup>2</sup>) 5330 kg.cm.sec<sup>2</sup> Revolutions per minute 360

Flywheel dia. 1400 mm Weight 1750 kg. Means of ignition compression Kind of fuel used Diesel oil

Crank Shaft, Solid forged dia. of journals as per Rule as approved 165mm Crank pin dia. 165mm Crank Webs Mid. length breadth 270mm Thickness parallel to axis -

Flywheel Shaft, diameter as per Rule as approved 165mm Generator armature, moment of inertia (kg-m<sup>2</sup>) 452 kg.cm.sec<sup>2</sup>

Are means provided to prevent racing of the engine governor Means of lubrication forced Kind of damper if fitted flexible couplings

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-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 driven by engine - 2.7 m<sup>3</sup>/h capacity oil engine of 9 HP.Air Compressors, No. 14 m<sup>3</sup>/h capacity. No. of stages two Diameters 75 mm - 64 mm Stroke 60mm Driven by

Scavenging Air Pumps or Blowers, No. - How driven - Copy of certificate attached.

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

(other than main engines) State full details of safety devices spring loaded safety valves.

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. four Total cubic capacity 640 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  $\geq 45 \text{ Kg/mm}^2$  Working pressure 35 Kg/cm<sup>2</sup>

ELECTRIC GENERATORS:—Type protected - self ventilated

Pressure of supply 220 volts. Full Load Current 570 Amperes. Direct or Alternating Current direct 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 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 -

PLANS.—Are approved plans forwarded herewith for Shafting 19/8/50 Receivers 10/6/47 Separate Tanks -

Have Torsional Vibration characteristics if applicable been approved 25/10/55 Armature shaft Drawing No. Sc.C.2937

Has the spare gear required by the Rules been supplied yes

(logiv. 3 11100000.A)

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.

Lloyd's Register Foundation

011461-011468-0057



Dates of Survey while building  
During progress of work in shops - - - From 10/3/55 to 27/2/56  
During erection on board vessel - - - From 15/2/56 to 10/4/56  
Total No. of visits. 24 + 6 = 30

Dates of Examination of principal parts - Cylinders to 9/12/55 From 15/9/55 Covers to 14/11/55 From 10/3/55 Pistons to 31/10/55 From 6/6/55 Piston rods -  
Connecting rods From 6/6/55 to 31/10/55 Crank and Flywheel shafts from 13/8/55 to 6/10/55 Intermediate shafts -

Crank shaft Material S.M. Steel Tensile strength > 50 kg/mm2  
Elongation ≥ 25 % Identification Marks Lloyd's Gen. S.4205 AG-29.9.55 S.4209 AG-29.9.55

Flywheel shaft, Material Identification Marks S.4207 AG-6.10.55 S.4208 AG-13.10.55

Identification marks on Air Receivers. 2-283344, 2-283348, 2-283357, 2-283358

Lloyd's Test. - Gen.  
70 kg/cm2  
W.P. 35 kg/cm2  
GM - 8/7/55

Is this machinery duplicate of a previous case. yes If so, state name of vessel "GIOVANNI AGNELLI", see Genoa Rpt. N°21459.

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 materials and workmanship are good. These sets have been satisfactorily fitted on board and tried under working condition at full power with satisfactory results.

N.B.: These oil engines are fitted with explosion relief devices.

4m.62. - (MADE AND PRINTED IN ENGLAND)  
(The Surveyors are requested not to write on or below the space for Committee Minutes.)

FE. 1/1. 193,000.  
The amount of Fee 1m 15% £ 1/1 : 163,200  
CAR + UNY - - - - - 3,254  
Travelling Expenses (if any) £ 1/1 : 21,216  
REV. TAX - - - - - 5631

When applied for 12/3/ 1956  
When received 10/

(A. Grasselli & G. Vigo)

Surveyor to Lloyd's Register of Shipping.

Committee's Minute FRIDAY 15 JUN 1956

Assigned

See Rpt. 46.

Lloyd's Register  
Foundation