

pt. 4c.

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 16821
(GENOVA)

Received at London Office.

1 NOV 1948

Date of writing Report 22 - 8 - 19 48 When handed in at Local Office 31.8. 1948 Port of GENOVA

No. in Survey held at GENOVA Date, First Survey 25 - 3 - 1948 Last Survey 29 - 7 - 19 48
eg. Book. 7723 on the ~~Patn~~ ^{Single} ~~Triple~~ ^{Quadruple} Screw vessel C.R.D.A. YARD No. "1737" M.V. "TOMAR" Number of Visits 23

Tons Gross 6410 Net 3869

Built at MONFALCONE By whom built CANTIERI RIUNITI DELL'ADRIATICO Yard No. 1737 When built 1948

Owners WILH. WILHELMSEN Port belonging to TONSBERG

Oil Engines made at GENOVA-SAMPIERDARENA By whom made S.A. ANSALDO - STAB. MECCANICO Contract No. 2656105 When made 1948

Generators made at GENOVA-CORNIGLIANO By whom made S.A. ANSALDO - STAB. ELETTROTECNICO Contract No. 13063 When made 1948

No. of Sets 3 Engine Brake Horse Power 300 each M.N. as per Rule 75 each Total Capacity of Generators 600 Kilowatts.

Is Set intended for essential services YES

OIL ENGINES, &c.—Type of Engines Ansaldo Q265/6 - Airless Intaction 2 or 4 stroke cycle 4 Single or double acting Single

Maximum pressure in cylinders 54 Kg/cm² Diameter of cylinders 265 m/m Length of stroke 410 m/m No. of cylinders 6 No. of cranks 6Mean indicated pressure 6.6 Kg/cm² Ring order in cylinders 1-5-3-6-2-4 Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 350 m/mIs there a bearing between each crank Yes Moment of inertia of flywheel 1185 Kg.m² Revolutions per minute 375

Flywheel dia. 1400 m/m Weight 1340 Kg. Means of ignition Compression Kind of fuel used Diesel oil

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

Flywheel Shaft, diameter as per Rule as approved 165 m/m Intermediate Shafts, diameter as fitted - General armature, moment of inertia 1267.78 Kg.cm² sec. 2

Are means provided to prevent racing of the engine when detached Governor manifold Means of lubrication Forced Kind of damper if fitted -

Are the cylinders fitted with safety valves Yes Are the exhaust pipes and steamers water cooled or lagged with non-conducting material Lagged

Cooling Water Pumps, No. Two: 115 m/m-stroke 100 Is the sea suction provided with an efficient strainer which can be cleared within the vessel YES

Lubricating Oil Pumps, No. and size One: Gear Type 3820 liters/h. SEE RPT. 4 (B)

Air Compressors, No. - No. of stages - Diameters - Stroke - Driven by -

Scavenging Air Pumps, No. - Diameter - Stroke - Driven by -

AIR RECEIVERS:—Have they been made under Survey Yes State No. of Report or Certificate Herewith Attached

Is each receiver, which can be isolated, fitted with a safety valve as per Rule YES

Can the internal surfaces of the receivers be examined Yes What means are provided for cleaning their inner surfaces Wire Brushes

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 by Rules -

Starting Air Receivers, No. 3 Total cubic capacity 160 lit. x 3 Internal diameter 351 m/m thickness 8.5 m/m

Seamless, lap welded or riveted longitudinal joint Seamless material Steel Range of tensile strength 55/65 Kg/mm² Working pressure by Rules 35 Kg/cm²

ELECTRIC GENERATORS:—Type Protected - Self-Ventilated

Pressure of supply 220 volts Full Load Current 910 Amperes Direct or Alternating Current Direct

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 - and do the results comply with the requirements -

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

Details of driven machinery other than generator - NONE

PLANS.—Are approved plans forwarded herewith for Shafting 5/3/47 as for Ansaldo Receivers 10/6/47 Separate Tanks -

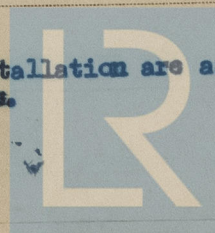
Have Torsional Vibration characteristics if applicable been approved 5/3/47 as for Ansaldo Yard No. 877 Armature shaft Drawing No. 10/4/47 as for Ansaldo Yard No. 877

SPARE GEAR TO BE SUPPLIED AT TRIESTE. IN ACCORDANCE WITH RULES.

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

ANSALDO S.A.
STABILIMENTO MECCANICO
Un Vico Direttore
(Sgd) Illegible.

Manufacturer.

© 2020
Lloyd's Register
Foundation

004684-004692-0255

Dates of Survey while building During progress of work in shops - - From 25/3/48 to 29/7/48
During erection on board vessel - -
Total No. of visits. 23

Dates of Examination of principal parts—Cylinders 19/4/48:- 17/7/48 Covers 3/5/48:- 21/6/48 Pistons 3/5/48:- 17/5/48 Piston rods -

Connecting rods 3/5/48:- 17/5/48 Crank and Flywheel shafts 7/5/48:- 1/7/48 Intermediate shafts -

Crank shaft Material S.M. Steel Tensile strength $\geq 50 \text{ Kg/mm}^2$
Elongation $\geq 25\%$ Identification Marks Lloyd's R 716 Lloyd's R 691
AG 28-5-48 AG 7-5-48 AG 27-10-47

Flywheel shaft, Material - Identification Marks -

Identification marks on Air Receivers 1-89830
LLOYD'S TEST
70 Kg/cm²
W.P. 35 Kg/cm²
CM. 23/7/47.

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.) These sets have been constructed under special su
of tested materials and are in accordance with the Secretary's Letters, approved plans and rule requirements. The
torsional characteristics of the complete dynamic system have been approved for a service speed of 375 R.p.m. The
materials and workmanship are good. Each engine coupled to its electric generator (Reports 7.b sent to Trieste office)
Has been tried under working condition on the bench and found satisfactory.

These sets have now been despatched to Trieste to be fitted on board the C.R.D.A. Yard No. 1737.

These engines and their electric generators have been
fitted on board the vessel in an efficient
manner and found satisfactory when tested under
full working conditions.

John McAfee

The amount of Fee ... £ : : When applied for 19
Travelling Expenses (if any) £ : : When received 19

(Sgd) A. GRASELLI

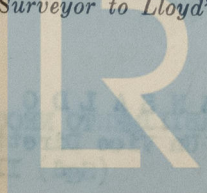
Surveyor to Lloyd's Register of Shipping.

Committee's Minute

FRI 20 MAY 1949

Assigned

In amils see J.S. Rpb



Lloyd's Register
Foundation