

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 12647

Received at London Office 13 OCT 1932
 Writing Report 22-9-32 When handed in at Local Office 7.10.32. Port of GENOA.
 Survey held at GENOA. Date, First Survey AUGUST 29TH 30. Last Survey SEPTEMBER 20TH 1932
 Number of Visits 46.

on the ^{Single} ~~Triple~~ Screw vessel "REX". Tons { Gross 51062. Net 30622.68

at SESTRI PONENTE, GENOA. By whom built S.A. ANSALDO. Yard No. 296. When built 1932.
 S.A. ITALIA. (FLOTTE UNITA COSULICH, LLOYD SABAUDO, NAV. GENERALE) Port belonging to GENOA.

Engines made at CORNIGLIANO, GENOA. By whom made CANTIERI OFFICINE SAVOIA S.A. Contract No. 3321-2-3. When made 1932.
 Motors made at CORNIGLIANO, GENOA. By whom made ANSALDO, STABILIMENTO ELEK-TECNICA Contract No. 6607-8-9. When made 1932.

Sets THREE Engine Brake Horse Power 416 EACH Nom. Horse Power as per Rule 119 EACH. Total Capacity of Generators 840. Kilowatts.

ENGINES, &c.—Type of Engines DIESEL SAVOIA M.A.N. SOLID INJECTION 2 or 4 stroke cycle 4. Single or double acting SINGLE.
 Pressure in cylinders 45. Kg. CM². Diameter of cylinders 270. 7/8. Length of stroke 420. 7/8. No. of cylinders 8. No. of cranks 8.

Bearings, adjacent to the Crank, measured from inner edge to inner edge 324. 7/8. Is there a bearing between each crank YES.
 Revolutions per minute 375. Flywheel dia. 1500 7/8. Weight 1800 Kgs. Means of ignition COMPRESSION. Kind of fuel used DIESEL OIL.

Shaft, dia. of journals as per Rule 158.7 7/8. Crank pin dia. 170. 7/8. Crank Webs Mid. length breadth 280. 7/8. Thickness parallel to axis. ✓
 as fitted 170. 7/8. Mid. length thickness 85. 7/8. Thickness around eye hole. ✓

Steel Shaft, diameter as per Rule. Intermediate Shafts, diameter as fitted. Thickness of cylinder liners 25 7/8 & 22.5 7/8.

Governor or other arrangement fitted to prevent racing of the engine YES. Means of lubrication FORCED.
 Cylinders fitted with safety valves YES. Are the exhaust pipes and silencers water cooled or lagged with non-conducting material LAGGED.

Water Pumps, No. ONE. Is the sea suction provided with an efficient strainer which can be cleared within the vessel YES.
 Lube Oil Pumps, No. and size ONE (GEAR WHEELS).

Compressors, No. ✓ No. of stages ✓ Diameters ✓ Stroke ✓ Driven by ✓
 Suction Air Pumps, No. ✓ Diameter ✓ Stroke ✓ Driven by ✓

RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule YES.
 Internal surfaces of the receivers be examined NO. What means are provided for cleaning their inner surfaces WIRE BRUSHES.

Drain arrangement fitted at the lowest part of each receiver YES.
 Pressure Air Receivers, No. ✓ Cubic capacity of each ✓ Internal diameter ✓ thickness ✓

Seams, lap welded or riveted longitudinal joint ✓ Material ✓ Range of tensile strength ✓ Working pressure by Rules ✓
 Suction Air Receivers, No. FOUR. Total cubic capacity 2550. LITRES. Internal diameter TWO. 400. 7/8. thickness 17. 7/8.

Seams, lap welded or riveted longitudinal joint 2. SEAMLESS. Material STEEL. Range of tensile strength 36.7-42.3. Kg. CM². Working pressure by Rules 32.2. Kg. CM².
 37.7. Kg. CM².

ELECTRIC GENERATORS:—Type SCREEN PROTECTED. SHUNT WOUND.
 Voltage of supply 220. volts. Load 1270. (EACH) Amperes. Direct or Alternating Current DIRECT.

Alternating current system, state frequency of periods per second ✓
 Automatic Governor been tested and found efficient when the whole load is suddenly thrown on or off YES.

Generators, do they comply with the requirements regarding rating YES. are they compound wound NO.
 over compounded 5 per cent. ✓, if not compound wound state distance between each generator TWO IN AUX. ENG. ROOM. 2 METRES APART.

Adjustable regulating resistance fitted in series with each shunt field YES. Are all terminals accessible, clearly marked, and furnished with sockets YES.
 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.

S. Are approved plans forwarded herewith for Shafting YES. 10.4.30. Receivers YES. 5.5.31. Separate Tanks YES. 13.5.31.
 (If not, state date of approval)

GEAR DIESEL ENGINES. GENERATORS.
 CYLINDER COVERS COMPLETE WITH VALVES ETC. ✓ ONE ARMATURE ✓

FUEL VALVES COMPLETE ✓ ONE MAIN AND AUXILIARY FIELD COILS. ✓

PISTONS COMPLETE WITH RINGS AND GUDGEONS. ✓ ONE SET OF BRUSHES. ✓

EACH, CRANK PIN & MAIN BEARING BOLTS & NUTS. ✓ ONE SET BEARING BRASSES FOR EACH SET. ✓

COMPLETE SETS WORKING PARTS OF FUEL PUMPS. ✓ ONE COMPLETE FIELD REGULATOR. ✓

OF ALL SPRINGS USED. ✓

OF EACH, MAIN BEARING, CRANK PIN AND GUDGEON
 PIN BRASSES. ✓

The foregoing is a correct description.
 CANTIERI OFFICINE SAVOIA
 It Directors
 Manufacturer.

TUE 25 OCT 1932

3 JAN 1933

FRI 8 MAR 1933



1930. AUG. 29. SEPT. 29. OCT. 21. NOV. 7. 21. 28. DEC. 5. 18. 30. 1931. JAN. 8. 26. 27. 29. FEB. 5. 10. 13. Rpt. 50.
MAR. 3. 11. 17. 27. 30. APRIL 8. 23. 29. MAY. 21. JUNE. 2. 8. JULY. 6. 21. AUG. 18. SEPT. 11. OCT. 1.
During progress of work in shops -
During erection on board vessel -
Total No. of visits FORTY FIVE. (45).

Dates of Examination of principal parts—Cylinders 26.1.31 to 5.2.31. Covers 17.3.31 to 29.4.31. Pistons 27.1.31 to 17.3.31. Piston rods

Connecting rods 5.2.31. Crank and Flywheel shaft 18.12.30 AND 26.1.31. Intermediate shaft

Crank and Flywheel shafts, Material STEEL. Identification Mark LLOYDS 221. JNL 18/2.30, 218. JNL 26.1.31, 222. JNL 26.1.31

Intermediate shafts, Material Identification Marks

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 DIESEL ENGINES HAVE BEEN CONSTRUCTED UNDER SPECIAL SURVEY OF TESTED MATERIALS AND ARE IN ACCORDANCE WITH THE SECRETARY'S LETTERS, APPROVED PLANS AND RULE REQUIREMENTS.

THE MATERIALS AND WORKMANSHIP ARE GOOD AND EACH SEPERATE SET, WHEN TESTED UNDER POWER, WAS FOUND SATISFACTORY IN EVERY RESPECT.

THEY HAVE NOW BEEN SATISFACTORILY FITTED ON BOARD THE S.S. "REX" TOGETHER WITH THEIR RESPECTIVE GENERATORS. ALL SETS HAVE BEEN RUN INDIVIDUALLY AND IN PARALLEL ON BOARD WITH GOOD RESULTS.

DUAL SURVEY
L.R. & R.I.

The amount of Fee ... Lit. 3380.00
Travelling Expenses (if any) Lit. 150.00
R.I. slip
When applied for, 8-4-1932
When received, 26-7-1932
GIVE FORM N° 2816
ALREADY SENT TO YOU.

Surveyors to Lloyd's Register of Shipping.

Committee's Minute

TUE. 25 OCT 1932

FRI. 26 MAY 1933

Assigned

See other rpt
for 12647