

19 NOV 1953

4c.

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 19628

of writing Report 15/10/53 When handed in at Local Office 21/10/53 Port of GENOA Received at London Office

Survey held at GENOA and LA SPEZIA Date, First Survey 19-2-53 Last Survey 9-10-53 19

Book 1645 on the Twin Screw vessel "FRANCESCO BIBOLINI" Number of Visits 10

at MUGGIANO By whom built S.A. ANSALDO - CANTIERE DI MUGGIANO Yard No. 1484 When built 1953

ers C.I.A. di NAVIGAZIONE BIBOLINI S.P.A. Port belonging to GENOA.

Engines made at GENOA-SANPIERREARENA By whom made S.A. ANSALDO - STABILIM. MECCANICO Engine No. 21314550 When made 1953

rators made at GENOA-CORNIGLIANO By whom made S.A. ANSALDO-SAN GIORGIO-STABIL ELETTROMECCANICO Generator No. 15128 When made 1953

f Sets ONE B.H.P. of each Set 125 M.N. as per Rule 31 each Capacity of each Generator 75 Kilowatts.

t intended for essential services YES

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

imum pressure in cylinders 55 Kg/cm² Diameter of cylinders 215 mm Length of stroke 310 mm No. of cylinders 4 No. of cranks 4

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

ere a bearing between each crank YES Moment of inertia of flywheel (16 m² or Kg. cm²) 1852 Kg. cm² Revolutions per minute 450

heel dia. 1185 mm Weight 845 Kg. Means of ignition COMPRESSION Kind of fuel used DIESEL Oil

Solid forged as per Rule as approved. Crank pin dia. 130 mm Crank Webs Mid. length breadth 200 mm Thickness parallel to axis 7

Shank Shaft, dia. of journals as fitted 130 mm Mid. length thickness 64 mm shrunk Thickness round eye-hole 7

heel Shaft, diameter as per Rule as approved Generator armature moment of inertia (16 m² or Kg. cm²) 338 Kg. cm²

means provided to prevent racing of the engine GOVERNOR Means of lubrication FORCED Kind of damper if fitted

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

iven by engine ing Water Pumps No. and how driven ONE: 100 mm Stroke: 52 mm Is the sea suction provided with an efficient strainer which can be cleared within the vessel YES

iven by engine icating Oil Pumps No. and size ONE: GEAR TYPE: 2300 1/4

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

enging Air Pumps or Blowers, No. How driven

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

(other than main engines)

full details of safety devices SPRING LOADED SAFETY VALVE

the internal surfaces of the receivers be examined and cleaned YES

ere a drain arrangement fitted at the lowest part of each receiver YES

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

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

ing Air Receivers, No. ONE Total cubic capacity 160 litres Internal diameter 354 mm thickness 8.5 mm

less, lap welded or riveted longitudinal joint SEAMLESS Material S.M. STEEL Range of tensile strength 55/65 Kg/cm² Working pressure 35 Kg/cm²

CTRIC GENERATORS:—Type ANSALDO - PROTECTED - SELF VENTILATED.

ure of supply 220 volts Full Load Current 347 Amperes Direct or Alternating Current DIRECT CURRENT.

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

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

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

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

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

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

ls of driven machinery other than generator YES

NS.—Are approved plans forwarded herewith for Shafting 14-3-51 Receivers 10-6-47 Separate Tanks YES

(If not, state date of approval)

Torsional Vibration characteristics if applicable been approved 14-3-51 Armature shaft Drawing No. SEC. 2206 A

(State date of approval and name of previous duplicate case, if any)

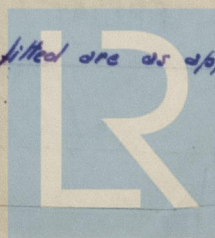
he spare gear required by the Rules been supplied YES.

ANSALDO S. A.
STABILIMENTO MECCANICO

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

Manufacturer.

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Foundation

Dates of Survey while building
During progress of work in shops - - - FROM 19-2-53 To 23-4-53
During erection on board vessel - - - FROM 10-6-53 To 9-10-53
Total No. of visits 10

Dates of Examination of principal parts—Cylinders 19-2-53 Covers 2-3-53 Pistons 9-3-53 Piston rods ✓
Connecting rods 9-3-53 Crank and Flywheel shafts 2-3-53 Intermediate shafts ✓

Crank shaft
Material S.M. STEEL Tensile strength $\geq 50 \text{ Kg/mm}^2$
Elongation 25% Identification Marks 22045 TEST 3.2519 A.C. 2-3-53

Flywheel shaft, Material ✓ Identification Marks ✓

Identification marks on Air Receivers 2-8-53 22045 TEST 30 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 "IGNAZIO BIBOLINI" - SEE GENOA REG. N° 19032.

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 LETTERS AND RULE REQUIREMENTS. THE TORSIONAL VIBRATION CHARACTERISTICS OF THE COMPLETE DYNAMIC SYSTEM HAVE BEEN APPROVED FOR A SERVICE SPEED OF 450 R.P.M.. THE MATERIALS AND WORKMANSHIP ARE GOOD. THIS SET HAS BEEN TRIED UNDER WORKING CONDITION ON THE BENCH WITH SATISFACTORY RESULTS. AND AFTERWARDS SATISFACTORILY FITTED ON BOARD. AFTER FITTING ON BOARD, THE SET HAS BEEN EXAMINED UNDER WORKING CONDITION AND FOUND SATISFACTORY.

The amount of Fee ... F.E. £t. 34,500.-
C.A.R. FUND - - - - - £t. 690.-
Travelling Expenses (if any) £t. 4,610.-
REV. TAX - - - - - £t. 1,194.-
When applied for 12/6/ 1953
When received 24/10/ 1953
FRIDAY - 4 DEC 1953
Committee's Minute
Assigned Lee minute on hull fe. etc.
Surveyor to Lloyd's Register of Shipping.
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