

9 JUN 1958

t. 4c
Date of writing report 19th May, 1958
Received London
Port of GENOA No. 23297
Place held at GENOA
No. of visits 25
First date 29/10/56
Last date 28/10/57

FIRST ENTRY REPORT ON AUXILIARY STEAM TURBINE OR STEAM RECIPROCATING ENGINES

Name of Ship "MIRADOR"
Contract No. if name unknown
Owners "MIRADOR" Cia Nav. Panamena S.p.A.
(Or Consignees)
Built at GENOA-SESTRI by S.A. ANSALDO-CANTIERI NAVALI when 1958 Yard No. 1522
Auxiliary turbines ~~engines~~ made at GENOA-SAMPIERDARE by S.A. ANSALDO STABILIMENTO MECCANICO when 1957 Eng. Nos. {1604, 1605
No. of sets and description Two 550 KW turbogenerator sets: each one consisting of a steam turbine driving a 550 KW d.c. generator through a single reduction gearing.

STEAM TURBINES. No. of turbines per set One BHP per set 770 Steam pressure 42 Kg/cm² Steam temperature 450°C
Type of turbines One impulse wheel with two rows of blades - 22 rows of reaction blading.
Particulars of gearing single reduction gearing.
Diameter of turbine shaft 8040 PCD of pinion 111.400 mm. PCD of wheels 894.120 mm. Material of shaft(s) Ni Cr Mo Steel Material of wheel rim(s) S.M. Steel
Has rotor been dynamically balanced? yes Diameter of rotor at bearings 80 mm. Does the set include a steam condenser? yes Is an emergency governor fitted? yes No. and purpose of attached pumps One: lubricating oil pump
Has the set been tested in the shop? yes If so, for how long at full power? 3 hours Was the governing tested and found satisfactory? yes Was the set tested with driven machinery attached? yes

Identification marks:
Turbine rotors: LLOYD'S GEN S 5441 SF 13/5/57, LLOYD'S GEN S 5424 SF 13/5/57. = 230 V. 1000 R.p.m.
Connections: LLOYD'S GEN 837 AG 23/9/57, LLOYD'S GEN 863 AG 23/9/57. =
Rim Wheels: { Shaft: LLOYD'S GEN 2924 AG 25/7/57, LLOYD'S GEN 2921 AG 25/7/57. =
Rim: LLOYD'S GEN 2940 AG 25/7/57, LLOYD'S GEN 2941 AG 25/7/57. =

STEAM RECIPROCATING ENGINES. BHP of each at RPM Steam pressure
No. of cylinders Stroke Dia. of crankshaft journals Pins Material of crankshaft
Is crankcase enclosed? If so, is the internal volume 20 cu. ft. or over? No. and total area of crankcase
Position relief devices fitted? Are the bearings forced lubricated? No. and Purpose of attached pumps
Is a Governor Fitted? Identification Marks

Particulars of Driven Machinery

CENTRIFUGAL GENERATORS. Port and No. of Certificate for generators of 100 Kw. and over GENOA - N° M 1760 - 1759
For generators under 100 Kw., has Makers' Certificate been obtained? Are Certificates attached? yes.

The foregoing description is correct.

ANSALDO S. A.
STABILIMENTO MECCANICO

Manufacturer

Is this machinery duplicate of a previous case? yes If so, which? ARGEA PRIMA - See Genoa Rpt. No. 20595. =

GENERAL REMARKS. State if the machinery has been constructed under special survey in accordance with the Rules, approved plans and Secretary's letters. The quality of materials and workmanship. Where existing machinery is submitted for classification the circumstances should be explained as fully as possible.
These two sets have been constructed under special survey of tested materials and are in accordance with approved plans, Secretary's letters and Rule Requirements. The materials and workmanship are good.
These sets have been satisfactorily tried under working condition in shop with satisfactory results.

Survey Fee. Lab. 1144.000 on 17/5/58 122400
CARR FEES 2448
EXPENSES 15952
TOTAL 174800
When a/c rendered 14/7/58 4224

(A. Grasselli) Engineer Surveyor to Lloyd's Register

Declaration to be signed by Surveyor at fitting-out Port:— The above described machinery has been fitted on board the S/S "MIRADOR" GENOA in a proper manner and found satisfactory when tested on the date 26-27/4/58. under full working conditions.

(S. Follo) Engineer Surveyor to Lloyd's Register

005082-005088-0060



Rpt. 4c

Date of writing report 19th May, 1958

Received London

Port of GENOA

No.

Survey held at GENOA

No. of visits 10

First date 9/5/57

Last date 7/10/57

FIRST ENTRY REPORT ON AUXILIARY INTERNAL COMBUSTION ENGINES

Name of Ship "MIRADOR" Owners "MIRADOR" Cia Nav. Panamena S.p.A. (Or Contract No. if name unknown)

Ship Built at GENOA-SESTRI by S.A. ANSALDO-CANTIERI NAVALI when 1958 Yard No. 1940

Auxiliary Engines or Gas Turbines made at SAMPIERDARENA by S.A. ANSALDO STABILIMENTO MEC. when 1957 Eng. Nos. 213 and 214

Total No. of sets and description (including type name) One 120 KW Oil Engine-Generator Set - Oil Engine type ANSALDO CANTIERI

INTERNAL COMBUSTION RECIPROCATING ENGINES. No. of cylinders per engine 6 Dia. of cylinders 215 mm. Stroke 310 mm.

2 or 4 stroke cycle 4 Maximum approved BHP 180 at 430 RPM Corresponding MIP 6.5 Kg/cm2 Maximum pressure 60 Atm

Fuel Diesel Oil Are cylinders arranged in Vee or other special formation? No. cranks per engine - Is engine of opposed piston type? No.

per engine None No. of exhaust gas driven blowers or superchargers per engine None Is welded construction used for: Bedplate? No Entablature? No Total Internal volume of crankcase (if 20 cu. ft. or over) 0.780 m3

crankcase explosion relief devices 6-328,8 cm2 Are flame guards or traps fitted? No Cooling medium for: Cylinders S.W.

Pistons None No. of attached pumps: F.W. cooling - S.W. cooling One Lubricating oil One How is engine started? Compressed Air.

SHAFTING. Is a damper or detuner fitted? No No. of main bearings 8 Are bearings of ball or roller type? No

inner edges of bearings in way of cranks 268 mm. Crankshaft: Solid. Material of crankshaft S.M. Steel

minimum tensile strength 50 Kg/mm2 Dia. of pins 130 mm. Journals 130 mm. Breadth of webs at mid throw 225 mm.

thickness 64 mm. If shrunk, radial thickness around eyeholes - Dia. of flywheel 1250 mm. Weight 955 Kg.

weights fitted? No Total weight - Rad. of gyration - Dia. of flywheel shaft 130 mm.

Has each engine been tested in shop? Yes How long at full power? Three hours Was it tested with driven machinery attached? Yes

governing tested and found satisfactory? Yes Date of approval of torsional vibration characteristics (for engines of 150 BHP and over) 31/1/57

Date of approval of shafting 15-3-55 Identification marks on shafting LLOYD'S GEN S 3736

Particulars of driven machinery 120 d.c. electric generator. SF 13/5/57

220 V - 522 A Serial No. 8434.

Port and No. of Certificate for Starting Air Receivers Copy of Certificate herewith attached.

AUXILIARY GAS TURBINES. BHP per set At RPM of output shaft. Open or closed cycle?

Arrangement of turbines. HP drives at RPM HP gas inlet temp. pressure

(A small diagram should be attached showing gas cycle) IP " " " " " " LP " " " " " "

No. of air compressors per set Centrifugal or axial flow type? Material of turbine blades

Material of compressor blades No. of air coolers per set No. of heat exchangers per set

turbines started? Are the turbines operated in conjunction with free piston gas generators?

Total No. of free piston gas generators Dia. of working pistons Dia. of compressor pistons No. of double

per minute at full power Gas delivery pressure Gas delivery temperature

Have the turbines and attached equipment been tested in shop? How long at full power? Were they tested with driven machinery

attached? Particulars of gearing Particulars of driven machinery

Date of approval of plans Identification marks

ELECTRIC GENERATORS. Port and No. of Certificate for generators of 100 Kw. and over GENOA No. M 1769.-

For generators under 100 Kw., has Makers' Certificate been obtained? - Are Certificates attached? Yes.

The foregoing description is correct and the particulars are as approved for torsional vibration characteristics (strike out words not applicable)

STABILIMENTO MECCANICO

Is this machinery duplicate of a previous case? Yes If so, which? S/S "ARGEA PRIMA" - See Genoa Rpt No. 20595.

GENERAL REMARKS. State if the machinery has been constructed under special survey in accordance with the Rules, approved plans and Secretary's

State quality of materials and workmanship. Where existing machinery is submitted for classification the circumstances should be explained as fully as possible

This set has been constructed under special survey of tested materials and is in accordance with the plans, Secretary's letter and Rule Requirements. The materials and workmanship are good. This set has

been tried under working condition in shop at full power with satisfactory results.

Survey Fee Lt 48000 @ 15% Lt 40800 = Expenses Lt 5784 = Date when a/c rendered REV TAX Lt 1433 = 14/6/58

Declaration to be signed by Surveyor at fitting-out Port: - The above described machinery has been fitted on board the S/S "MIRADOR" at GENOA in a proper manner and found satisfactory when tested on the (date) 26/4/58 under full working conditions

(A. Grasselli) Engineer Surveyor to Lloyd's Register (S. Follo) Engineer Surveyor to Lloyd's Register