

t. 4c

of writing report 19th May, 1958 Received London Port of GENOA No. 23297  
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

Ship "MIRADOR"  
Contract No. if name unknown)  
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  
NA.= { 1605  
No. of sets and description Two 550 KW turbogenerator sets : each one consisting of a steam turbine driving a  
KW d.c. generator through a single reduction gearing.  
AM TURBINES. No. of turbines per set One BHP per set 770 Steam pressure 42 Kg/cm<sup>2</sup> Steam temperature 450°C  
of turbines One impulse wheel with two rows of blades - 22 rows of reaction blading.  
iculars of gearing single reduction gearing.  
of turbine shaft(s) 8040 PCD of pinion(s) 111.400 mm. PCD of wheels(s) 894.120 mm. Material of  
n(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  
shed pumps One : lubricating oil pump Has the set been tested in the shop? yes If so, for how long at full  
r? 3 hours Was the governing tested and found satisfactory? yes Was the set tested with driven machinery attached? yes  
tification marks : Particulars of driven machinery 550 KW d.c.generator-2400 Amp.  
bine 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.  
ions : LLOYD'S GEN 837 AG 23/9/57, LLOYD'S GEN 863 AG 23/9/57.  
r 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.=

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

CTRIC GENERATORS. Port and No. of Certificate for generators of 100 Kw. and over GENOA - N° M 1760 - 1759  
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 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.  
e quality of materials and workmanship. Where existing machinery is submitted for classification the circumstances should be explained as fully as possible.  
se 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.  
se sets have been satisfactorily tried under working condition in shop with satisfactory results.

ey Fee. L. 114.000 Lm 17.26 122400  
can FUND - 56 2448  
enses 26 15952  
U. 144 - 28 4224  
when a/c rendered 14/1/58

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

variation 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  
itions.

( 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"

(Or Contract No. if name unknown).

Ship Built at GENOA-SESTRI

Owners "MIRADOR" Cia Nav. Panamena S.p.A.  
(Or Consignees)Auxiliary Engines ~~on Gas Turbines~~ made at GENOA SAMPIERDARENA

by S.A. ANSALDO-CANTIERI NAVALI when 1958 Yard No. 1

by S.A. ANSALDO STABILIMENTO MEC. when 1957 Eng. Nos. 213

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/cm<sup>2</sup> Maximum pressure 60

Fuel Diesel Oil Are cylinders arranged in Vee or other special formation? No. If so, s. Tw

crankshafts per engine - Is engine of opposed piston type? No. No. and type of mechanically driven scavenge pumps or

per engine None No. of exhaust gas driven blowers or superchargers per engine None Is welded const

used for: Bedplate? No Entablature? No Total Internal volume of crankcase (if 20 cu. ft. or over) 0.780 m<sup>3</sup> No. and totalcrankcase explosion relief devices 6-328,8 cm<sup>2</sup> 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? B

Compressed Air.

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

inner edges of bearings in way of cranks 268 mm. Crankshaft: ~~cast iron~~ solid. Material of crankshaft S.M. Steelminimum tensile strength 50 Kg/mm<sup>2</sup> 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. Are I ves

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

Particulars of driven machinery 120 d.c. electric generator. S 3736 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 ma

attached? Particulars of gearing

Date of approval of plans Identification marks Particulars of driven machinery

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 p

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

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

Survey Fee Lt 4.8000 Un 15% Lt 40.800 =

Expenses Lt 5284 =

Date when a/c rendered REV TAX Lt 816 =

14/1/58

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 condition

(A. Grasselli)

Engineer Surveyor to Lloyd's

(S. Follo)

Engineer Surveyor to Lloyd's