

Rpt. 4c

25391

Date of writing report Genoa & La Spezia Received London No. of visits 8 Port of Genoa No. 25391 First date 19/5/58 Last date 8/1/59

FIRST ENTRY REPORT ON AUXILIARY INTERNAL COMBUSTION ENGINES

Name of Ship "CRISTINA D'AMICO" Owners "ORTIGIA" S.p.A. di Navigazione (Or Consignees) Ship Built at La Spezia Muggiano by S.A. Ansaldo-Cantieri Muggiano when 1960 Yard No. 1540 Auxiliary Engines ~~XXXXXXXXXX~~ made at Genoa-Sampierdarena by S.A. Ansaldo-Stabilimento Meccanico when 1959 Eng. Nos. 2654315 Total No. of sets and description (including type name) ONE- 150 KW Oil engine generator set - Oil engine type Ansaldo Q 265/4

INTERNAL COMBUSTION RECIPROCATING ENGINES. No. of cylinders per engine 4 Dia. of cylinders 265 mm. Stroke 410 mm. 2 or 4 stroke cycle 4 Maximum approved BHP 225 at 400 RPM Corresponding MIP 6,6 Kg/cm2 Maximum pressure 60 Kg/cm2 Fuel Diesel Oil Are cylinders arranged in Vee or other special formation? no crankshafts per engine - Is engine of opposed piston type? no No. and type of mechanically driven scavenge pumps or blowers 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) 1,320 m3 No. and total area of crankcase explosion relief devices 4 - 219 cm2 Are flame guards or traps fitted? no Cooling medium for: Cylinders S.W. Pistons - No. of attached pumps: F.W. cooling - S.W. cooling ONE Lubricating oil ONE How is engine started? by compressed air.

SHAFTING. Is a damper or detuner fitted? no No. of main bearings 6 Are bearings of ball or roller type? no Distance between inner edges of bearings in way of cranks 354 mm. Crankshaft: ~~XXXXXXXXXX~~ solid. Material of crankshaft S.M. steel Approved minimum tensile strength 50 Kg/mm2 Dia. of pins 165 mm. Journals 165 mm. Breadth of webs at mid throw 270 mm. Axial thickness 78,5 mm. If shrunk, radial thickness around eyeholes - Dia. of flywheel 1400 mm. Weight 1810 Kg. Are balance weights fitted? no Total weight - Rad. of gyration - Dia. of flywheel shaft 165 mm. Has each engine been tested in shop? yes How long at full power? 3 hours Was it tested with driven machinery attached? yes Was the governing tested and found satisfactory? yes Date of approval of torsional vibration characteristics (for engines of 150 BHP and over) 9.5.58 414 N Date of approval of shafting 15.3.55 Identification marks on shafting LLOYD'S GEN. P. 30 W.G. 4-9-58. Particulars of driven machinery 150 KW d.c. generator. 230 Volts, 652 A, C.R.D.A. serial N° 138900. Port and No. of Certificate for Starting Air Receivers ( Milan N° A-27 dd. 18/3/58 (copies of certificates herewith attached).

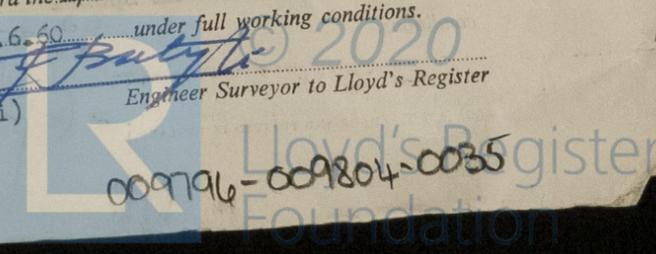
AUXILIARY GAS TURBINES. BHP per set At RPM of output shaft. Open or closed cycle? Arrangement of turbines. HP drives at RPM HP gas inlet temp. pressure. IP " " " " " LP " " " " " Material of turbine blades. No. of air compressors per set Centrifugal or axial flow type? No. of air coolers per set No. of heat exchangers per set How are 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 strokes per minute at full power Gas delivery pressure Gas delivery temperature Were they tested with driven machinery attached? How long at full power? 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 To be forwarded by Trieste Surveyors. For generators under 100 Kw., has Makers' Certificate been obtained? Are Certificates attached? No.

The foregoing description is correct and the particulars are as approved for torsional vibration characteristics (strike out words not applicable) ANSALDO S.A. STABILIMENTO MECCANICO Manufacturer "MARIA ADELAIDE" See Genoa Report No. 24885.

Is this machinery duplicate of a previous case? Yes. If so, which? GENERAL REMARKS. State if the machinery has been constructed under special survey in accordance with the Rules, approved plans and Secretary's letters. State quality of materials and workmanship. Where existing machinery is submitted for classification the circumstances should be explained as fully as possible. This engine has been constructed under special survey of tested materials and is in accordance with the approved plans, Secretary's letters and Rule Requirements. The materials & workmanship are good. This engine has been tried under working condition in shop at full power with satisfactory result.

Survey Fee Lt 54.700 ten 10% - Lt 46.495 Expenses Lt 7.275 Date when a/c rendered (see nfe obol. 10/10/59) ( W. Giunti ) 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 M/T "CRISTINA D'AMICO" under full working conditions. at La Spezia in a proper manner and found satisfactory when tested on the (date) 13.6.50 (F. Battagli) Engineer Surveyor to Lloyd's Register



Rpt. 4c

Date of writing report 29th Sept., 1960. Received London Port of Genoa No. 25391.11  
 Survey held at Genoa & La Spezia No. of visits 26 First date 14/11/57 Last date 24/9/59

FIRST ENTRY REPORT ON AUXILIARY STEAM TURBINE ~~OR STEAM~~  
~~RECIPROCATING ENGINES~~

Name of Ship "CRISTINA D'AMICO" Owners ORTIGIA - S.p.A. di Navigazione  
 (Or Contract No. if name unknown) (Or Consignees)  
 Ship Built at La Spezia-Muggiano by S.A. Ansaldo-Cantieri di Muggiano when 1960 Yard No. 1540  
 Auxiliary turbines or engines made at Genoa-Sampierdarena by S.A. Ansaldo-Stabilimento Meccanico when 1959 Eng. Nos. (1644, 1645)  
 Total No. of sets and description TWO - 550 KW turbogenerator sets : each consisting of steam turbine driving a 550 KW d.c. generator through single reduction gearing.

STEAM TURBINES. No. of turbines per set One BHP per set 770 Steam pressure 47 Kg/cm<sup>2</sup> 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.  
 RPM of turbine shaft 8154 PCD of pinion 128,988 mm. PCD of wheel 876,530 mm. Material of pinion Cr.Ni.Mo.Steel Material of wheel rim carbon steel Has rotor been dynamically balanced? yes Diameter of rotor shaft 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 Particulars of driven machinery 550 KW d.c. generator 2400 Amps 230 V - 1000 RPM, Ansaldo S. G. P. serial N° 16120-16121.  
 TURBINE ROTORS LLOYD'S GEN.-S.5653 W.G. 13-8-59 = LLOYD'S GEN. S.5651 W.G. 13-8-59.  
 PINIONS LLOYD'S GEN.-P.1474 A.G. 29-5-59 = LLOYD'S GEN. P.1475 A.G. 1-6-59.  
 GEAR WHEELS (RIMS : LLOYD'S GEN.-P.2934 A.G. 15-6-59 = LLOYD'S GEN. P.2933 A.G. 29-5-59.  
 (SHAFTS : LLOYD'S GEN.-P.2912 A.G. 15-6-59 = LLOYD'S GEN. P. 83 A.G. 29-5-59.

STEAM RECIPROCATING ENGINES. BHP of each at RPM Steam pressure  
 Dia. 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 explosion relief devices fitted? Are the bearings forced lubricated? No. and purpose of attached pumps Is a Governor Fitted? Identification Marks

Particulars of Driven Machinery

ELECTRIC GENERATORS. Port and No. of Certificate for generators of 100 Kw. and over Genoa N° M.2133 & M.2134.  
 For generators under 100 Kw., has Makers' Certificate been obtained? - Are Certificates attached? yes (to Rpt.13).

The foregoing description is correct.

ANSALDO S.A.  
 STABILIMENTO MECCANICO

*[Signature]*

Manufacturer

Is this machinery duplicate of a previous case? yes ( "MARIA" ) If so, which? ( "ADELAIDE" See Genoa Report No. 24885.

GENERAL REMARKS. State if the machinery has been constructed under special survey in accordance with the Rules, approved plans and Secretary's letters. State quality of materials and workmanship. Where existing machinery is submitted for classification the circumstances should be explained as fully as possible.

These sets have been constructed under special survey of tested materials and are in accordance with the 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 Lt 150,000 @ 15% = 22,500  
 Expenses Lt 20,195  
 REV. TAX (see note dtd. 10/10/59)  
 Date when a/c rendered

*[Signatures]*  
 (A. Grasselli & W. Giunti).  
 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/T "CRISTINA D'AMICO" at La Spezia in a proper manner and found satisfactory when tested on the (date) 13.6.60 under full working conditions.

*[Signature]*  
 (F. Battagli)  
 Engineer Surveyor to Lloyd's Register

