

Rpt. 4c

Date of writing report 6th December, 1964.

Received London

Port GENOA

No. 30070 1

Survey held at GENOA

No. of visits 14

First date 22/7/1963

Last date 20/12/1964

FIRST ENTRY REPORT ON AUXILIARY STEAM TURBINE OR STEAM RECIPROCATING ENGINES

Name of Ship m.t. "RAPHAEL"
(Or Contract No. if name unknown)

Owners BLACKSEA STATE STEAMSHIP LINES-USSR-
(Or Consignees)

Ship Built at GENOA SESTRI by ANSALDO S.A. CANTIERE NAVALE when 1964 Yard No. 1598

Auxiliary turbines or engines made at GENOA SAMPIERDARENA by ANSALDO S.A. STAB. MECCANICO when 1964 Eng. Nos. 1767

Total No. of sets and description One electric generator set consisting of one steam turbine driving a 562.5 kVA alternator through a single reduction gearing

STEAM TURBINES. No. of turbines per set one BHP per set 612 Steam pressure 12 Kg./cm² Steam temperature 205°C

Type of turbines one single row impulse wheel followed by fifteen reaction stages

Particulars of gearing single reduction double helical gearing

RPM of turbine shaft(s) 9931 PCD of pinion(s) 108,832mm. PCD of wheel(s) 720,542mm. Material of pinion(s) Mi-Cr-Mo steel Material of wheel rim(s) C-V steel Has rotor been dynamically balanced? yes Diameter of rotor shaft at bearings 60mm. 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? one hour Was the governing tested and found satisfactory? yes Was the set tested with driven machinery attached? yes

Identification marks Turbine rotor P.6 BT. 20/5/64 Particulars of driven machinery 450 kW (.8PF) 400 V.

" " pinion P.8 BT. 25/5/63 50 cycle-1500 RPM-ANSALDO SAN GIORGIO.

" " gear wheel rim P.2 BT. 9/12/63 Mo. 500293

" " gear wheel shaft P.49 BT. 9/12/63

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 No.M.7522.

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

The foregoing description is correct.

ANSALDO S.p.A.
STABILIMENTO MECCANICO
Manufacturer

Is this machinery duplicate of a previous case? yes If so, which? m.t. "GIUSEPPE VERDI" (ANSALDO YARD 1597).

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 turbo generator has been manufactured under special survey of tested materials and in accordance with the approved plans, Secretary's letters and Rule Requirements, the material and workmanship are good. The turbo generator has been tested in the shop under full power working conditions with satisfactory results.

Survey Fee Lit. 44.345

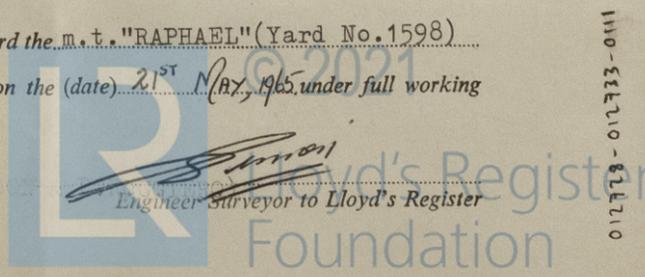
Expenses Lit. 2.000

R.T. (see ann A/c. N° 8390 dd. 5/8/1965)

Date when a/c rendered

(B.S. THOMPSON) & (P. RUGGIERO)
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. "RAPHAEL" (Yard No. 1598) at ANSALDO S.A. CANTIERE NAVALE SESTRI in a proper manner and found satisfactory when tested on the (date) 21st Nov, 1965 under full working conditions.



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