

Rpt. 4c

Date of writing report 20th June, 1964.

Received London

Port GENOA

No.

29129

Survey held at GENOA

No. of visits 7

First date 21/11/1963 Last date 8/5/1964

FIRST ENTRY REPORT ON AUXILIARY STEAM TURBINE OR STEAM RECIPROCATING ENGINES

Name of Ship m.t. "GIORDANO BRUNO"
(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. 1595

Auxiliary turbines or engines made at GENOA SAMPIERDA by ANSALDO S.A. STAB. MECCANICO when 1964 Eng. Nos. 1764

Total No. of sets and description one 450 kW generator set consisting of one steam turbine driving a 562.5 kVA alternator through single reduction gearing.

STEAM TURBINES. No. of turbines per set one BHP per set 612 Steam pressure 12 Kg/cm² or 8 Kg/cm² Steam temperature saturated 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) 108.832 PCD of wheel(s) 720.542mm. Material of

pinion(s) Ni-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 Particulars of driven machinery 450 kW (0.8 PF) 400 V 50 HZ 1,500 RPM ANSALDO SAN GIORGIO No. 500296.

Turbine rotor P3 SD. 23/12/63 - LLOYD'S GEN.

Pinion P9A SD. 23/12/63 - LLOYD'S GEN.

Gear wheel rim P3 BT. 19/6/63 - LLOYD'S GEN.

Gear wheel shaft P47 BT. 19/6/63 - LLOYD'S GEN.

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 Cert. NO. M. 7070

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

The foregoing description is correct.

Manufacturer
ANSALDO S.p.A.
STABILIMENTO MECCANICO

Is this machinery duplicate of a previous case? yes If so, which? ANSALDO SESTRI Yard No. 1593 - m.v. "LEONARDO DA VINCI"

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 is in accordance with the approved plans, Secretary's letters and Rule Requirements. The materials and workmanship are good. The turbo generator has been tested in the shop under full power working conditions with satisfactory results. Upon completion of trials the turbine has been opened up and the parts examined found to be in good condition.

Survey Fee Lit. 74.375

Expenses Lit. 2.000

R.T. (see note A/c no. 6243 dd. 7/8/1964)

Date when a/c rendered 7/8/1964

(B.S. THOMPSON)

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. "GIORDANO BRUNO" at ANSALDO S.A. CANTIERE NAVALE in a proper manner and found satisfactory when tested on the (date) 23/6/64 under full working conditions.

(S. DINNEN)

Engineer Surveyor to Lloyd's Register