

Rpt. 4c

Date of writing report 28th December, 1959

Received London

Port of Milan

No. 19

Survey held at Legnano

No. of visits

42

First date 16.6.58

Last date 2.12.59

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

Name of Ship Yard 1849 - Cantieri Riuniti dell'Adriatico Owners -  
(Or Contract No. if name unknown) (Or Consignees)

Ship Built at San Marco, Trieste by Cantieri Riuniti dell'Adriatico when 1958 Yard No. 1849

Auxiliary turbines or engines made at Legnano by Messrs. FRANCO TOSI S.P.A. when 1959 Eng. Nos. 3988 - 3989

Total No. of sets and description Two: Turbo Generator Sets, each consisting of a steam turbine driving a 750 KW alternating current generator - through a single reduction gearing 9000/1200 R.p.M.

STEAM TURBINES. No. of turbines per set One BHP per set 750 KW Steam pressure 58.7 Kg/sq.cm Steam temperature 454°C

Type of turbines R.C.7390 Tosi-Westinghouse - Impulse type - 9 rows of bladings - horizontal shaft

Particulars of gearing Double helio - single reducting gearing.

RPM of turbine shaft(s) 9000/1' PCD of pinion(s) 4.73" PCD of wheel(s) 38.9" Material of pinion(s) Cr.Ni.Mo. Steel Material of wheel rim(s) S.M. Steel Has rotor been dynamically balanced? Yes Diameter of rotor shaft at bearings 90 mm. Does the set include a steam condenser? - Is an emergency governor fitted? Yes No. and purpose of attached pumps One - Lub.oil pump Has the set been tested in the shop? Yes If so, for how long at full power? 4 hours Was the governing tested and found satisfactory? Yes Was the set tested with driven machinery attached? Yes

Identification marks See Rpt.9a attached Particulars of driven machinery for each set:

One alternating current generator, rated 750 Kw - 450 V - 1220 A - at 1200 R.p.m.

Manufacturers: Cantieri Riuniti dell'Adriatico - Monfalcone - Serial No. 8003554 - 8003553

Type G S N/1260-6

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 Trieste office

For generators under 100 Kw., has Makers' Certificate been obtained? - Are Certificates attached? No.

The foregoing description is correct.

FRANCO TOSI S.P.A., Legnano

Manufacturer

Is this machinery duplicate of a previous case? Yes If so, which? Report No.18 of Milan, dd. 16th June, 1959 - Yard No.1841 Cantieri Riuniti dell'Adriatico.

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 material and in accordance with the approved plans, Secretary's letters and Rules Requirements. All parts subjected to internal pressure have been examined under hydraulic test to Rule Requirements, and found sound and satisfactory. The turbine rotor, blading and reduction gearing have been examined on completion and found, so far as could be seen, sound and free from defects. Rotors, pinions and gear wheels were statically and dynamically balanced with satisfactory results. The material and the workmanship are good. These sets have been examined under steam in shop running at full power. The governor and the emergency governor were tried in operation with satisfactory results. These sets have been despatched to Trieste, to be fitted on board the yard No.1849 of Messrs. CANTIERI RIUNITI DELL'ADRIATICO.

Survey Fee .....Lit. 199,800=Expenses ....." 64,750=Rev.Tax ....." 7,937=Date when a/c rendered 9/1/60.

( D. CECCHI *Secchi*  
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 "Esso DUBLIN" C.R.D.A. Yard No. 1849  
at MONFALCONE in a proper manner and found satisfactory when tested on the (date) 27/4/60 under full working conditions.

*Lloyd's Register*  
Engineer Surveyor to Lloyd's Register



