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of writing report 30-9-58 Received London Port of Stockholm No. 19220  
 held at Stockholm No. of visits 9 First date 28.2.58 Last date 26.5.59.

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

me of Ship Contract No. if name unknown Owners (Or Consignees)  
 Built at Rijeka by Messrs. Brodogradiliste "3 maj" when 1959 Yard No. 460  
 Auxiliary turbines or engines made at Stockholm by A/B de Laval's Ångturbin when 1959 Eng. Nos. 45069  
 Total No. of sets and description One Back Pressure Impulse Turbo Generating Set  
 Type VM 0.63 D6D.

TEAM TURBINES. No. of turbines per set 1 SHP 680 Steam pressure 41.4 ATÖ Steam temperature 460° C  
 Type of turbines Impulse  
 Particulars of gearing Single Reduction, Double Helical  
 P.M. of turbine shaft(s) 13000 PCD of pinion(s) 94.685 mm PCD of wheel(s) 1025.373 mm Material of  
 Wheel(s) Electro Steel Material of wheel rim(s) Electro Steel Has rotor been dynamically balanced? Yes Diameter of rotor  
 Shaft at bearings 49.75 & 59.7 mm Does the set include a steam condenser? No 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? 18 HRS Was the governing tested and found satisfactory? Yes Was the set tested with driven machinery attached? Yes  
 Identification marks Rotor:- NAP 3406 SKM WAC 6.12.58. Particulars of driven machinery A.C. Generator, Siemens  
 Wheel Rim:- 8906 SKM WAC 2.12.58. Type F-3341-6 P21. 3 phase 60 cycles  
 Wheel Shaft:- 1572 SKM WAC 20.2.58. Rating 560 KVA at 1200 r.p.m.  
 Pinion:- 1577 SKM WAC 11.10.58. Driven through an elastic coupling.  
 Couplings:- 2209/10 SKM WAC 13.3.58.  
 2238, 2244 SKM WAC 15.3.58.  
 3788 SKM AB 28.2.58.

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  
 are  
 kes

ELECTRIC GENERATORS. Port and No. of Certificate for generators of 100 Kw. and over. Augsburg, Marked LLOYDS AUG LR W SE 19.11.57.  
 For generators under 100 Kw., has Makers' Certificate been obtained? Are Certificates attached?

The foregoing description is correct.

Laas Norberg  
 AB DE LAVALS ÅNGTURBIN Manufacturer  
 Technical section

Is this machinery duplicate of a previous case? Yes If so, which? Brodogradiliste Yard No. 459.

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 machinery has been constructed under Special Survey of tested and approved materials and  
 in accordance with the approved plans, Secretary's letters and the requirement of the Rules. The materials and  
 workmanship are good and the machinery coupled to its electric generator (No. 417390) was tested at the Engine  
 Builders' Works under full load conditions. The governor hand tripping and automatic steam-shut-off arrangements  
 were tested and operated satisfactorily. On completion the machinery was opened up, examined and alignment  
 gauges adjusted. In my opinion, this machinery is eligible to have the notation of +LMC when securely fitted  
 onboard a vessel to the inspection and satisfaction of the Society's Surveyors.

Survey Fee Kr. 390:-- Expenses Kr. 27:--  
 Date when a/c rendered 30-9-58  
 W.A. Leach  
 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 t.t. "TRUD"  
 at Rijeka in a proper manner and found satisfactory when tested on the (date) 28/10/60 under full working  
 conditions.

Fred. E. Bush  
 Engineer Surveyor to Lloyd's Register  
 Lloyd's Register  
 Foundation  
 011619 - 011621 - 0027