

Rpt. 4c

Date of writing report 20-9-59

Received London DEFOCT 1959

Port of Stockholm

No. 12222

Survey held at Stockholm

No. of visits 11

First date 19.12.57.

Last date 11.5.59.

FIRST ENTRY REPORT ON AUXILIARY STEAM TURBINE OR STEAM RECIPROCATING ENGINES

Name of Ship..... Owners.....
 (Or Contract No. if name unknown) (Or Consignees)

Ship Built at Rijeka by 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. 45064, 066

Total No. of sets and description..... 2 Impulse Condensing Turbines direct coupled, each to one boiler feed water pump.

STEAM TURBINES. No. of turbines per set 1 SHP 255 BHP per set 255 Steam pressure 41.0 kg/cm² Steam temperature 280°C

Type of turbines Impulse MH
 Particulars of gearing None

RPM of turbine shaft(s) 5000 PCD of pinion(s) - PCD of wheel(s) - Material of pinion(s) - Material of wheel rim(s) - Has rotor been dynamically balanced? Yes Diameter of rotor shaft at bearings 48 mm Does the set include a steam condenser? No Is an emergency governor fitted? Yes No. and purpose of attached pumps 1 gear wheel type lub. oil pump Has the set been tested in the shop? Yes If so, for how long at full power? 6 hours each Was the governing tested and found satisfactory? Yes Was the set tested with driven machinery attached? Yes

Identification marks..... Eng. No. 45064 Eng. No. 45066 Particulars of driven machinery Boiler feed water pump of multi-stage type 4 pl 12.5 K10 capacity 1333 lit/min at 540 metres' head.

Turbine shaft	1942 SKM WAC 30.5.58.	9235 SKM WAC 30.5.58.	
Turbine wheel	1452 SKM GF 8.9.58.	1453 SKM GF 8.9.58.	
Turbine coupling	1510 SKM KE 8.2.58.	174 SKM AR 30.4.58.	
Turbine casing	132 SKM AR 26.2.58.	131 SKM AR 20.2.58.	
LLOYDS TEST	6/84 KGS SKM WAC	2/4-9.58.	

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.....

ELECTRIC GENERATORS. Port and No. of Certificate for generators of 100 Kw. and over.....
 For generators under 100 Kw., has Makers' Certificate been obtained?..... Are Certificates attached?.....

The foregoing description is correct.

Berkil Jerng
 AB DE LAVALS ÅNGTURBIN Manufacturer
 Technical section

Is this machinery duplicate of a previous case? Yes If so, which? Rijeka 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 requirements of the Rules.

The materials and workmanship are good and the machinery coupled to their pumps number 45065 and 45067 were tested under full output conditions and approved. The governor, hand tripping and automatic steam shut off arrangements functioned satisfactorily on test. On completion of the test bed trials the machinery was opened up, examined and found satisfactory.

The wear down gauges adjusted and marked accordingly.

Survey Fee £ 340.-
 Expenses £ 42.-
 Date when a/c rendered 30-3-59

W. A. Brooks
 Engineer Surveyor to Lloyd's Register
For self & A. J. Cross
 "TRVD"

Declaration to be signed by Surveyor at fitting-out Port:— The above described machinery has been fitted on board the Rijeka in a proper manner and found satisfactory when tested on the (date) 28/10/60 under full working conditions.

PLEASE RETURN THIS REPORT WITH YOUR FIRST ENTRY.

Prof. G. Brown
 Engineer Surveyor to Lloyd's Register
 Lloyd's Register Foundation