Form 4c

Date of writing report 28/3-1958. Received London ..... Port GOTHENBURG. No. 24300

Survey held at JÖNKÖPING. No. of visits 5. First date 3/1 Last date 30/2-1958.

FIRST ENTRY REPORT ON AUXILIARY INTERNAL COMBUSTION ENGINES

Name of Ship "S I G N E I N G E L S S O N" Owners A.-B. Transmarin (Or Consignees)

(Contract No. if name unknown).

Built at Gothenburg. by A.-B. Götaverken when 1958 Yard No. 728

Auxiliary Engines ~~Gas Turbines~~ made at Jönköping by A.-B. Jönköpings Motorfabrik when 1958 Eng. Nos. 3024/5

Total No. of sets and description (including type name) 2 Götaverken Diesel Motors type 300/450 G6

INTERNAL COMBUSTION RECIPROCATING ENGINES. No. of cylinders per engine 6 Dia. of cylinders 300 mm. Stroke 450 mm.

4 stroke cycle 4 Maximum approved BHP 365 at 350 RPM Corresponding MIP 6.5 kg/cm^2 Maximum pressure 49 kg/cm^2

Fuel Diesel Oil Are cylinders arranged in Vee or other special formation? No. If so, No. of

crankshafts per engine --- Is engine of opposed piston type? No. No. and type of mechanically driven scavenge pumps or blowers

per engine None. No. of exhaust gas driven blowers or superchargers per engine None. Is welded construction

approved for: Bedplate? No. Entablature? No. Total internal volume of crankcase (if 20 cu. ft. or over) 4.5 m^3 No. and total area of

crankcase explosion relief devices 5x119 = 595 cm^2 Are flame guards or traps fitted? Yes. Cooling medium for: Cylinders Fresh Water.

Pistons --- No. of attached pumps: F.W. cooling --- S.W. cooling --- Lubricating oil One. How is engine started? Compr.Air

SHAFTING. Is a damper or detuner fitted? No. No. of main bearings 7 Are bearings of ball or roller type? No. Distance between

inner edges of bearings in way of cranks 378 mm. Crankshaft: ~~Built xxxxxxxx~~ solid. Material of crankshaft S.M. Steel Approved

minimum tensile strength 44 kg/mm^2 Dia. of pins 190 mm. Journals 190 mm. Breadth of webs at mid throw 260 mm. Axial

thickness 105 mm. If shrunk, radial thickness around eyeholes --- Dia. of flywheel 1500 mm. Weight 1440 kgs. Are balance

weights fitted? No. Total weight --- Rad. of gyration --- Dia. of flywheel shaft Integral

Has each engine been tested in shop? Yes. How long at full power? 6 hours Was it tested with driven machinery attached? Yes. Was the

governing tested and found satisfactory? Yes. Date of approval of torsional vibration characteristics (for engines of 150 BHP and over) 16.8.57.

Date of approval of shafting 16/8-57. Identification marks on shafting LLOYD'S GOT 1331 BJ.17.10.57: LLOYD'S GOT 243 BJG 14.11.57.

Particulars of driven machinery One 240 KW Generator to each Diesel Motor.

Port and No. of Certificate for Starting Air Receivers .....

AUXILIARY GAS TURBINES. BHP per set ..... At ..... RPM of output shaft. Open or closed cycle? .....

Arrangement of turbines. (A small diagram should be attached showing gas cycle) HP drives ..... at ..... RPM HP gas inlet temp. ..... pressure .....

IP " ..... at ..... " IP " " " " "

LP " ..... at ..... " LP " " " " "

No. of air compressors per set ..... Centrifugal or axial flow type? ..... Material of turbine blades .....

Material of compressor blades ..... No. of air coolers per set ..... No. of heat exchangers per set ..... How are

turbines started? ..... Are the turbines operated in conjunction with free piston gas generators? .....

Total No. of free piston gas generators ..... Dia. of working pistons ..... Dia. of compressor pistons ..... No. of double strokes

per minute at full power ..... Gas delivery pressure ..... Gas delivery temperature .....

Have the turbines and attached equipment been tested in shop? ..... How long at full power? ..... Were they tested with driven machinery

attached? ..... Particulars of gearing .....

Date of approval of plans ..... Identification marks ..... Particulars of driven machinery .....

ELECTRIC GENERATORS. Port and No. of Certificate for generators of 100 Kw. and over Got. ESAB Serial No.63528/9.

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

The foregoing description is correct and the particulars are as approved for torsional vibration characteristics (strike out words not applicable)

AKTIEBOLAGET JÖNKÖPINGS MOTORFABRIK

Manufacturer

Is this machinery duplicate of a previous case? Yes. If so, which? Breda 206. Gothenburg First Entry Report No. 23876.

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 auxiliary engines have been built under Special Survey in accordance with the Rules, approved plans and Secretary's letters.

The workmanship and material used are good.

Certificate in respect of crank shafts are attached.

Survey Fee Kr.1120:-

Expenses Kr. 81:-

Date when a/c rendered 2/4-1958.

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. "SIGNE INGELSSON" at Gothenburg in a proper manner and found satisfactory when tested on the (date) 9/7 -58 under full working conditions.

Engineer Surveyor to Lloyd's Register

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