

18 JAN 1965

Rpt. 4c

Date of writing report 12-10-1964 Received London Amsterdam Port No. 26512  
Survey held at Zwolle No. of visits 6 First date 25-8-1964 Last date 8-10-1964

FIRST ENTRY REPORT ON AUXILIARY INTERNAL COMBUSTION ENGINES

Name of Ship (Or Contract No. if name unknown) Owners (Or Consignees)  
Ship Built at Flushing by Kon.Mij "DE SCHELDE" when 1964 Yard No. 527  
Auxiliary Engines or Gas Turbines made at Zwolle by Gebr. Stork & Co. N.V. when 1964 Eng. Nos. 9062/63/64  
Total No. of sets and description (including type name) three Stork Ricardo type BR 216

INTERNAL COMBUSTION RECIPROCATING ENGINES. No. of cylinders per engine 6 Dia. of cylinders 210 mm Stroke 300 mm  
2 or 4 stroke cycle 4 Maximum approved BHP 300 at 650 RPM Corresponding MIP 8,34 kg/cm2 Maximum pressure 60 kg/cm2  
Fuel diesel 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  
used for: Bedplate? no Entablature? no Total internal volume of crankcase (if 20 cu. ft. or over) 1.05 m3 No. and total area of  
crankcase explosion relief devices two - 245 cm2 Are flame guards or traps fitted? yes Cooling medium for: Cylinders FW  
Pistons uncooled No. of attached pumps: F.W. cooling one S.W. cooling - Lubricating oil one How is engine started? by 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 258 mm Crankshaft: ~~but some ball~~ solid. Material of crankshaft SM steel Approved  
minimum tensile strength 60 kg/mm2 Dia. of pins 140 mm Journals 140 mm Breadth of webs at mid throw 220 mm Axial  
thickness 65 mm If shrunk, radial thickness around eyeholes - Dia. of flywheel 1125 mm Weight 960 kg Are balance  
weights fitted? no Total weight - Rad. of gyration - Dia. of flywheel shaft on crankshaft  
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) 18-6-64  
Date of approval of shafting 25-5-64 Identification marks on shafting Lloyds AUG AT 19 3987-3988-3989 HKS 31-8-62 copy cert.att.  
Particulars of driven machinery one generator 220 V - 870 A - 200 Kw - Comp. Make Smit Slikkerveer  
type G 60/27 nos. 1-5960- 1A1 - 1A2 - 1A3

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. HP drives at RPM HP gas inlet temp. pressure  
(A small diagram should be attached showing gas cycle) IP at IP LP 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 Rott. no. 643802 - 803 d.d. 24-11-64  
For generators under 100 Kw., has Makers' Certificate been obtained? yes Are Certificates attached? yes

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

KONINKLIJKE MACHINEFABRIEK  
GEBR. STORK & CO. N.V.  
STORK DIESELMOTOREN ZWOLLE  
Manufacturer

Is this machinery duplicate of a previous case? no If so, which? -

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 engines have been constructed under Special Survey in accordance with the Rules, approved plans and  
Secretary's letters.  
Materials used tested as required and the workmanship found good.  
In my opinion these engines are suitable to be fitted in a ship classed or intended to be classed with  
this Society.

Turnover tax f. 45,71  
Survey Fee f. 982,11  
Expenses f. 115,-  
Date when a/c rendered 12-1-1965

J.A. van Lare  
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  
at Flushing in a proper manner and found satisfactory when tested on the (date) 31-3-65 under full working conditions.

Guang Ming  
Beaujeu  
Lloyd's Register  
Foundation