

Copy sent to Rotterdam Surveyors

Rpt. 4c

Date of writing report..... 12-10-1964
Received London.....
Port..... Amsterdam
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. 327
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: Ball screw back, 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 -

[illegible]

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.

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 Guang Ming
at Fuzhou in a proper manner and found satisfactory when tested on the (date) 31-3-65 under full working conditions.

Engineer-Surveyor to Lloyd's Register

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