

ed.....
4c
f writing report..... 22-9-1958
held at..... Zwolle

Received London 24 SEP 1958

Port..... of Amsterdam

No. 22373

First date 27/3/1957

Last date..... 6/1/1958

FIRST ENTRY REPORT ON AUXILIARY INTERNAL COMBUSTION ENGINES

Name of Ship.....
 Contract No. if name unknown).
 Built at..... **Vlissingen** by **Messrs. De Schelde** when..... Yard No. **294**
 Auxiliary Engines or Gas Turbines made at..... **Zwolle** by **Messrs. Gebr. Stork & Co.** when **1958** Eng. Nos. **7389/90/91**
 No. of sets and description (including type name)..... **Three Ricardo Engines type AR216**

INTERNAL COMBUSTION RECIPROCATING ENGINES. No. of cylinders per engine 6 Dia. of cylinders 210 mm Stroke 300 mm
4 stroke cycle 4 Maximum approved BHP 270 at 620 RPM Corresponding MIP 7.85 kg/cm² Maximum pressure 55 kg/cm²
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
engine - No. of exhaust gas driven blowers or superchargers per engine - 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 2 - 245 cm² Are flame guards or traps fitted? yes Cooling medium for: Cylinders fresh water
cooling uncooled No. of attached pumps: F.W. cooling one S.W. cooling - Lubricating oil one How is engine started? by air

AFTING. Is a damper or detuner fitted? no No. of main bearings 7 Are bearings of ball or roller type? no Distance between
 er edges of bearings in way of cranks. 258 mm Crankshaft: ~~not a crankshaft~~ solid. Material of crankshaft SM steel Approved
 Shipping actual minimum tensile strength 65 kg/mm² Dia. of pins 140 mm Journals 140 mm Breadth of webs at mid throw 215 mm Axial
 ckness 65 mm If shrunk, radial thickness around eyeholes - Dia. of flywheel 1125 mm Weight 700 kg Are balance
 ights fitted? no Total weight - Rad. of gyration - Dia. of flywheel shaft -
 is 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) 3/10/56
 8. Date of approval of shafting 3/10/56 Identification marks on shafting
 Lloyds AUG 8696 HKS 707287 - 31-10-56
 " AUG " HKS 707297 - 31-10-56
 particulars of driven machinery Generators Smit Slikkerveer
 " AUG " HKS 707295 - 31-10-56
 Nos 45223/4/5 - 180 Kw.

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.....

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

(A small diagram should be attached showing gas cycle) 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..... Rotterdam (Port of fitting out)
 6. For generators under 100 Kw., has Makers' Certificate been obtained?..... - Are Certificates attached?..... no

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

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

9-1 Is this machinery duplicate of a previous case? yes If so, which? de Schelde Yard No. 292.

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 built under Special Survey in accordance with the Rules, approved plans and Secretary's letters. Tested materials have been used and the workmanship is good.

The engines were tested under full load conditions and all found satisfactory. In my opinion these engines merit the approval of the Committee.

Survey Fee f. 678,--
Expenses " 60,--

Date when a/c rendered..... 23/9/1950

A.C.Buijze.

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.....in a proper manner and found satisfactory when tested on the (date).....under full working conditions.

Engineer Surveyor to Lloyd's Register

003147-003153-0114