

Rpt. 4c

Date of writing report 16.4.58 Received London 17 OCT 1958 Port Köln No. 359
Survey held at Köln-Deutz No. of visits 4 First date 6.12.57 Last date 13.1.58

FIRST ENTRY REPORT ON AUXILIARY INTERNAL COMBUSTION ENGINES

Name of Ship H.D. 2335 7079 Valcke Frères S.A., Antwerp
Ship Built at Köln-Deutz by Klöckner-Humboldt-Deutz AG when 12.57 Eng. Nos. 2185336-39
Auxiliary Engines of Gas Turbines made at Köln-Deutz by Klöckner-Humboldt-Deutz AG when 12.57 Eng. Nos. 2185336-39
Total No. of sets and description (including type name) one airless injection heavy oil A4M 517

INTERNAL COMBUSTION RECIPROCATING ENGINES. No. of cylinders per engine 4 Dia. of cylinders 130 mm Stroke 170 mm
Service BHP 54 at 1900 RPM Corresponding MIP 7.2 kg/cm2 Maximum pressure 70 kg/cm2
2 or 4 stroke cycle 4 Maximum approved BHP 83 at 1500 RPM
Fuel Diesel Are cylinders arranged in Vee or other special formation? no
crankshafts per engine - Is engine of opposed piston type? no
per engine none No. of exhaust gas driven blowers or superchargers per engine none
used for: Bedplate? no Entablature? no Total internal volume of crankcase (if 20 cu. ft. or over) 120 litres
crankcase explosion relief devices - Are flame guards or traps fitted? no Cooling medium for: Cylinders water
Pistons - No. of attached pumps: F.W. cooling - S.W. cooling one Lubricating oil one How is engine started? with air

SHAFTING. Is a damper or detuner fitted? no No. of main bearings 5 Are bearings of ball or roller type? no
inner edges of bearings in way of cranks 137 mm Crankshaft: Built, semi-built, solid Material of crankshaft Cr.-Steel
minimum tensile strength 80 kg/mm2 Dia. of pins 85 mm Journals 90 mm Breadth of webs at mid throw 130 mm Axial thickness 32.5 mm
If shrunk, radial thickness around eyeholes - Dia. of flywheel 550 mm Weight 145 kg Are balance weights fitted? -
Total weight - Rad. of gyration - Dia. of flywheel shaft - water brake
Has each engine been tested in shop? yes How long at full power? 6 hours Was it tested with driven machinery attached? -
governing tested and found satisfactory? yes Date of approval of torsional vibration characteristics (for engines of 150 BHP and over) -
Date of approval of shafting 21.7.57 Identification marks on shafting LLOYD'S KLN. 570/1 H.R. 26.6.57

Particulars of driven machinery generator One Siemens-Schuckert - alternating current generator
No. 427 929, Type F 244 f-6. One Hatlapa Compressor No. 15453
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 -
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 -
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)
Klöckner-Humboldt-Deutz Aktiengesellschaft Manufacturer
Is this machinery duplicate of a previous case? yes If so, which? Engine No. 2185392-95, KLN. Rpt. 330

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 engine has been constructed under special survey of tested materials and is in accordance with the Secretary's letters, approved plans and Rules Requirements. The materials and workmanship are good and the engine, when tested in the shops under full and overload conditions was found to function satisfactorily. This engine, in my opinion, is suitable for installation in a vessel classed with the Society.

Survey Fee DM 125.-- R.T. DM 50.-- Expenses DM 18.-- Date when a/c rendered 12.5.58; R 1887
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 under full working conditions.
at in a proper manner and found satisfactory when tested on the (date) Engineer Surveyor to Lloyd's Register

