

L.R. 635c

Rpt. 4c

Date of writing report 6.5.60

Received London

Port Köln

No. 548

Survey held at Köln-Deutz

No. of visits 4

First date 11.2.60

Last date 8.4.60

aggregate trials: 8.6.60

FIRST ENTRY REPORT ON AUXILIARY INTERNAL COMBUSTION ENGINES

Name of Ship H.D. 1.8844.5.0063
(Or Contract No. if name unknown)

Owners Astilleros Astarsa S.A., Buenos Aires
(Or Consignees)

Ship Built at Köln-Deutz by Klöckner-Humboldt-Deutz AG when 4.60 Yard No. -

Auxiliary Engines or Gas Turbines made at Köln-Deutz by Klöckner-Humboldt-Deutz AG when 4.60 Eng. Nos. 2599154-59

Total No. of sets and description (including type name) one airless injection heavy oil A6M 428

INTERNAL COMBUSTION RECIPROCATING ENGINES. No. of cylinders per engine 6 Dia. of cylinders 220mm Stroke 280mm
2 or 4 stroke cycle 4 Maximum approved BHP 230 at 600 RPM Corresponding MIP 6.6kg/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 - 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) 0.72 m³ No. and total area of

crankcase explosion relief devices 3, area 285 cm² Are flame guards or traps fitted? - Cooling medium for: Cylinders water

Pistons - No. of attached pumps: F.W. cooling - S.W. cooling - Lubricating oil one How is engine started? with 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 243 mm Crankshaft: Built, semi-built, solid Material of crankshaft SM. steel CK 45 Approved

minimum tensile strength 67 kg/mm² Dia. of pins 130 mm Journals 150 mm Breadth of webs at mid throw 225 mm Axial

thickness 57 mm If shrunk, radial thickness around eyeholes - Dia. of flywheel 950 mm Weight 795 kg Are balance

weights fitted? no 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? - Was the

governing tested and found satisfactory? yes Date of approval of torsional vibration characteristics (for engines of 150 BHP and over) are in preparation

Date of approval of shafting 1.7.55 Identification marks on shafting LLOYD'S DSF 923 H.S. 5.11.59

Particulars of driven machinery Generator No. 776309, Type NSykd 10-1235

Port and No. of Certificate for Starting Air Receivers unknown

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 ,, - 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 - Particulars of driven machinery -

Date of approval of plans - Identification marks -

ELECTRIC GENERATORS. Port and No. of Certificate for generators of 100 Kw. and over Hannover Certificate 60/329

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)

Signature: Klöckner-Humboldt-Deutz AG Manufacturer

Is this machinery duplicate of a previous case? yes If so, which? KLN. Rpt. 514, Engine No. 2590229-234

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 letter, 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 this Society.

Survey Fee DM 300.- RT DM 100.- Expenses DM 40.- Date when a/c rendered 9.5.60; A/C R 3596

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

