

FIRST ENTRY REPORT ON AUXILIARY INTERNAL COMBUSTION ENGINES

SHAFTING. Is a damper or detuner fitted? no No. of main bearings 5 Are bearings of ball or roller type? no Distance between inner edges of bearings in way of cranks 137 mm Crankshaft: Built, semi-built, solid Material of crankshaft Cr.-Steel Approved 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? - Was the 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 „ „ „ — „ „ „ —

(A small diagram should be attached showing gas cycle)

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. Ref. 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

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

Engineer Surveyor to Lloyd's Register

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