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writing report 9.9.57

Received London 10.9.57

Port LONDON

No. 136452

eld at Newhaven

No. of visits 4

First date 4.7.57

Last date 8.8.57.

FIRST ENTRY/REPORT ON AUXILIARY INTERNAL COMBUSTION ENGINES

of Ship. "TAKORADI PALM" Owners. Palm Line Ltd.
Contract No. if name unknown). ~~XXXXXX~~
Built at. Wesermünde - G. by. Deutsche S & M. when. 7-1937 Yard No. -
Dry Engine ~~XXX Gas Engine~~ made at. Rugby by. English Electric Co. Ltd. when. 1937 Eng. No. IH 760
No. of sets and description (including type name). One-Diesel engine driven generating set. Type 8K.

INTERNAL COMBUSTION RECIPROCATING ENGINES. No. of cylinders per engine... 8 Dia. of cylinders... 10" Stroke... 12"
 stroke cycle... 4 Maximum approved BHP... 400 at... 600 RPM Corresponding MIP... 500 p.s.i. Maximum pressure... 700 p.s.i.
 Diesel Oil Are cylinders arranged in Vee or other special formation? No If so, No. of
 afts per engine... - Is engine of opposed piston type? No No. and type of mechanically driven scavenge pumps or blowers
 me... None No. of exhaust gas driven blowers or superchargers per engine... None s welded construction
 Bedplate? No Entablature? No Total internal volume of crankcase (if 20 cu. ft. or over)... 62 cu. ft. No. and total area of
 se explosion relief devices... None fitted. Are flame guards or traps fitted? No Cooling medium for: Cylinders... Fresh Water
 Lub. Oil (Splash) No. of attached pumps: F.W. cooling... None S.W. cooling... None Lubricating oil... 1 How is engine started? Air
 s. 1, 2, 3 & 4 Cylinders.

ING. Is a damper or detuner fitted? No No. of main bearings 9 Are bearings of ball or roller type? No Distance between
ges of bearings in way of cranks. 5 1/2" Crankshaft: ~~Ball bearing~~ solid. Material of crankshaft. Steel Approved
m tensile strength. - Dia. of pins 6 1/2" Journals. 6 1/2" Breadth of webs at mid throw 8 1/2" Axial
ss. 2 1/2" If shrunk, radial thickness around eyeholes. - Dia. of flywheel 44 1/8" Weight 1 Ton. Are balance
fitted? No Total weight. - Rad. of gyration. - Dia. of flywheel shaft Flange Jointed between eng. & Genr.
h engine been tested in shop? Yes How long at full power? 4 hrs. Was it tested with driven machinery attached? Yes Was the
g tested and found satisfactory? Yes Date of approval of torsional vibration characteristics (for engines of 150 BHP and over). 29.8.57.
approval of shafting. 23.7.57 Identification marks on shafting. LLOYDS M.A.B. 13.10.37 8221.
lars of driven machinery 6 Pole 250 kW. 230 Volt size CD 52/6 D.C. Generator manufactured by
English Electric Co.
d No. of Certificate for Starting Air Receivers None

DIARY GAS TURBINES. BHP per set..... At..... RPM of output shaft. Open or closed cycle?.....

Number of turbines..... HP drives..... at..... RPM HP gas inlet temp..... pressure.....

Diagram should be showing gas cycle) IP „ at..... „ IP „ „ „ „ „ „ LP „ at..... „ LP „ „ „ „ „ „

Air compressors per set..... Centrifugal or axial flow type?..... Material of turbine blades.....

Number of compressor blades..... No. of air coolers per set..... No. of heat exchangers per set..... How are they started?..... Are the turbines operated in conjunction with free piston gas generators?.....

No. of free piston gas generators..... Dia. of working pistons..... Dia. of compressor pistons..... No. of double strokes.....

Output 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?.....

Particulars of gearing.....

Approval of plans..... Identification marks..... Particulars of driven machinery.....

RIC GENERATORS. Port and No. of Certificate for generators of 100 Kw. and over..... London D.55227
 erators under 100 Kw., has Makers' Certificate been obtained?.....No. Are Certificates attached?.....Yes
 l. Genr. Shaft 6 $\frac{1}{8}$ "

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

machinery duplicate of a previous case? ☐ 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. Quality of materials and workmanship. Where existing machinery is submitted for classification the circumstances should be explained as fully as possible.

As far as now seen the engine and generator were found to be sound, free from defects and workmanship satisfactory and such as might be accepted for use on a vessel classed or intended for Classification with this Society. As the proximity of the service speed of the engine to the order critical speed, calculated to occur at 571 R.P.M., it is recommended that the following photograph records be taken from one completed installation, preferably on the test bed, with a view to confirming the calculations. Crankcase explosion relief valves to be fitted to the engine in accordance with the Rules.

Fee Eng. & Genr. £46.0.0.
S £4.11.0.

en a/c rendered..... 11 SEP 1957

tion to be signed by Surveyor at fitting-out Port:— The above described machinery has been fitted on board the.

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

Engineer Surveyor to Lloyd's Register

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