

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS. No. 16680

Date of writing Report 9th June 1955 When handed in at Local Office 1955 Port of MANCHESTER Received at London Office 17 JUN 1955

Place in Survey held at Hazel Grove Date, First Survey 2nd March, 1955 Last Survey 25th May, 1955

Number of Visits 9 Name of vessel "City of Carlisle" Stock engine for Hall Lines Ltd.

By whom built, Yard No., When built, Port belonging to

Engines made at Hazel Grove By whom made Mirrlees, Bickerton & Day Ltd. Engine No. 47421 When made 1955

Generators made at, Generator No., When made, Capacity of each Generator - Kilowatts

Type of Engines T16 Heavy Oil 3 or 4 stroke cycle 4 Single or double acting Single

Maximum pressure in cylinders 800 PSI Diameter of cylinders 8 1/2" Length of stroke 13" No. of cylinders 6 No. of cranks 6

Span of bearings (i.e., distance between inner edges of bearings in way of a crank) 8 5/8" Moment of inertia of flywheel 476 lb. in sec^2

Revolutions per minute 600 Weight 1020 lbs Means of ignition Compression Kind of fuel used Diesel

Crank pin dia 5.9/16" Crank Webs Mid. length breadth 9 1/2" Thickness parallel to axis shrunk

Generator armature, moment of inertia 585 lb. in sec^2

Means provided to prevent racing of the engine Yes Means of lubrication Forced Kind of damper if fitted -

Lubricating Oil Pumps, No. and size One - 800 G.P.H. at 600 R.P.M.

RECEIVERS: Have they been made under Survey - State No. of Report or Certificate

Pressure Air Receivers, No., Cubic capacity of each, Internal diameter, thickness

Electric Generators: Type, Voltage, Full Load Current, Amperes, Direct or Alternating Current

Are approved plans forwarded herewith for Shafting 6.6.55 Receivers Separate Tanks

Torsional Vibration characteristics if applicable been approved Armature shaft Drawing No.

The foregoing is a correct description, H. Shanthi, Manufacturer.



Dates of Survey while building { During progress of work in shops - - } 1955. Mar. 2, 30. May. 2, 13, 18, 19, 23, 24, 25.  
 { During erection on board vessel - - - }  
 Total No. of visits

Dates of Examination of principal parts - Cylinders 2.3.55. 30.3.55. 18.5.55. Covers 19.5.55. Pistons - Piston rods -

Connecting rods 2.5.55. Crank and Flywheel shafts Intermediate shafts

Crank shaft { Material S.M. Steel. Tensile strength 40.4 T.P.I.  
 Elongation 26.0, 28.0 on 2" Identification Marks GCX 6604 LR 644 LVH 13.5.55.

Flywheel shaft, Material Identification Marks

Identification marks on Air Receivers

Is this machinery duplicate of a previous case If so, state name of vessel

**GENERAL REMARKS** (State quality of workmanship, opinions as to class, &c.) This heavy oil engine has been built under Special Survey of tested materials and in accordance with the Secretary's letters, approved plans and Rule requirements. The material is sound and free from defects. The workmanship is good. The engine, direct coupled to a dynamometer, was successfully tested at the Engine Builders' Works under the following conditions of loading - 6 hours 100% engine rating, one hour 10% overload, Governor trials. Crankcase explosion devices are fitted. It is stated that frequency tables will be submitted when the engine is eventually installed in a vessel to replace a similar engine previously supplied to Hall Lines Ltd.

Attached hereto:- Shaft Cert. No. F.169.

30,051-T. (MADE AND PRINTED IN ENGLAND)  
 (The Surveyors are requested not to write on or below the space for Committee Minute.)

The amount of Fee ... £ 22 :- : - { When applied for 16 6 19 55-9  
 Travelling Expenses (if any) £ 1, : 15 :- : - { When received 19

L. V. Hanset,  
 Surveyor to Lloyd's Register of Shipping.



Committee's Minute  
 Assigned