

Rpt. 4c

Date of writing report 13/3-1957. Received London 25 MAR 1957 Port. GOTHENBURG. No. 23115. Survey held at UDDEVALLA. No. of visits 15. First date 22.10.56. Last date 28.3.57.

FIRST ENTRY REPORT ON AUXILIARY INTERNAL COMBUSTION ENGINES

Name of Ship Single Screw Motor Tanker "S T A N V A L E" Owners Stanhope Steamship Co. Ltd. (Or Contract No. if name unknown) (Or Consignees) Ship Built at Uddevalla by A.-B. Uddevallavarvet when 1957 Yard No. 160 Auxiliary Engines ~~XXXXXX~~ made at Uddevalla by A.-B. Uddevallavarvet when 1957 Eng. Nos. 667 & 672 Total No. of sets and description (including type name) 2 sets Heavy Oil Aux. Engines A.-B. Götaverken's type G5.

INTERNAL COMBUSTION RECIPROCATING ENGINES. No. of cylinders per engine 5. Dia. of cylinders 300 mm. Stroke 450 mm. 2 or 4 stroke cycle 4. Maximum approved BHP 300 at 350 RPM Corresponding MIP 6 kg/cm² Maximum pressure 45 kg/cm² Fuel Diesel Oil. 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 None. No. of exhaust gas driven blowers or superchargers per engine None. Is welded construction used for: Bedplate? No. Entablature? No. Total Internal volume of crankcase (if 20 cu. ft. or over) 3.4 m³ No. and total area of crankcase explosion relief devices 4x140 cm² Are flame guards or traps fitted? Traps Cooling medium for: Cylinders Fresh Water. Pistons. No. of attached pumps: F.W. cooling None. S.W. cooling None. Lubricating oil 1 How is engine started? By compressed air.

SHAFTING. Is a damper or detuner fitted? No. No. of main bearings 6. Are bearings of ball or roller type? No. Distance between inner edges of bearings in way of cranks 378 mm. Crankshaft: ~~XXXXXX~~ solid. Material of crankshaft S.M. Steel Approved minimum tensile strength 44 kg/mm² Dia. of pins 190 mm. Journals 190 mm. Breadth of webs at mid throw 260 mm. Axial thickness 105 mm. If shrunk, radial thickness around eyeholes. Dia. of flywheel 1500 mm. Weight 3800 kgs. Are balance weights fitted? No. Total weight. Rad. of gyration. Dia. of flywheel shaft. Has each engine been tested in shop? Yes. How long at full power? Abt. 8 hours Was it tested with driven machinery attached? Yes. Was the governing tested and found satisfactory? Yes. Date of approval of torsional vibration characteristics (for engines of 150 BHP and over) 28.2.57. Date of approval of shafting 28.2.57. Identification marks on shafting LLOYD'S GOT. NO. 4307 AS. 9.8.56. LLOYD'S GOT. NO. 1059 BJ.13.9.56. Particulars of driven machinery Generator only.

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. Gothenburg Nos. 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) UDDEVALLAVARVET AKTIEBOLAG Manufacturer

Is this machinery duplicate of a previous case? Yes. If so, which? M/T "RAGNA GORTHON", Yard No. 142, Got. F.E. Rpt.No. 22190.

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. These Auxiliary Engines have been built under Special Survey in accordance with the Rules and approved plans. The workmanship and material used are good, and test sheets in respect of the latter are attached. In addition to these auxiliary engines, one steam reciprocating engine manufactured by Reader having No. 28053 and rating 230 BHP at 450 RPM, has also been fitted. This engine is built under Special Survey as per Nottingham Surveyors' Certificate No. C24612 attached herewith.

Survey Fee Kr. 740:- Expenses Date when a/c rendered 19th March, 1957. 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 M/T "STANVALE" at Uddevalla. in a proper manner and found satisfactory when tested on the (date) 28.2.57. under full working conditions. Engineer Surveyor to Lloyd's Register