

See Completed in Bonn 1919

pt. 4c.

REPORT ON OIL ENGINE ELECTRIC GENERATOR SETS.

No. 1615.

Date of writing Report 5. 4. 1934 When handed in at Local Office 7. 4. 1934 Port of Bremen Received at London Office 12 APR 1934

No. in Survey held at Augsburg Date, First Survey 18th Sept. 1933 Last Survey 11th Nov. 1933
Reg. Book. Number of Visits 18

Single on the Twin Triple Quadruple } Screw vessel DANUBE SHELL II Tons } Gross
Net

Built at Budapest By whom built Faur & Co. Yard No. 1430 When built 1933/34

Owners Inland Waterway Co Port belonging to London

Oil Engines made at Augsburg By whom made Masch. Fabrik Augsburg-Nürnberg Contract No. 491 450 When made 1933
Generators made at Budapest By whom made Faur & Co Contract No. When made 1933/34

No. of Sets 1 Engine Brake Horse Power 1x45 Nom. Horse Power as per Rule 11.6 Total Capacity of Generators 30 Kilowatts.

ENGINES, &c.—Type of Engines W3 Va 16/22 MAN heavy oil engine 2 or 4 stroke cycle 4 Single or double acting single

Maximum pressure in cylinders 50 atm Diameter of cylinders 160 mm Length of stroke 220 mm No. of cylinders 3 No. of cranks 3

Span of bearings, adjacent to the Crank, measured from inner edge to inner edge 202 mm Is there a bearing between each crank yes

Revolutions per minute 530 Flywheel dia. 1100 x 250 mm Weight 575 kg Means of ignition solid ign. Kind of fuel used Diesel oil (on fuel bed)

Crank Shaft, dia. of journals as per Rule. as fitted 105 mm Crank pin dia. 105 mm Crank Webs Mid. length breadth 150 mm Thickness parallel to axis. Mid. length thickness 46 mm Thickness around eye-hole

Flywheel Shaft, diameter as per Rule. as fitted. Intermediate Shafts, diameter as per Rule. as fitted. Thickness of cylinder liners 13.5/8 mm

Is a governor or other arrangement fitted to prevent racing of the engine when declutched yes Means of lubrication forced

Are the cylinders fitted with safety valves yes Are the exhaust pipes and silencers water cooled or lagged with non-conducting material water cooled

Cooling Water Pumps, No. 1, worked from engine Is the sea suction provided with an efficient strainer which can be cleared within the vessel

Lubricating Oil Pumps, No. and size 1, about 435 ltr/h at 550 rpm

Air Compressors, No. No. of stages Diameters Stroke Driven by

Savenging Air Pumps, No. Diameter Stroke Driven by

RECEIVERS:—Is each receiver, which can be isolated, fitted with a safety valve as per Rule yes

Are the internal surfaces of the receivers examined yes What means are provided for cleaning their inner surfaces Cover on top

Is there a drain arrangement fitted at the lowest part of each receiver yes

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

Seamless, lap welded or riveted longitudinal joint Material Range of tensile strength Working pressure by Rules

Working Air Receivers, No. Total cubic capacity 55.6 m³ Internal diameter 249 mm thickness 9 mm

Seamless, lap welded or riveted longitudinal joint Seamless Material S. M. Steel Range of tensile strength 44-50 kg/cm² Working pressure by Rules 30 atm

ELECTRIC GENERATORS:—Type

Pressure of supply volts. Load Amperes. Direct or Alternating Current

Is an alternating current system, state frequency of periods per second

Is the Automatic Governor been tested and found efficient when the whole load is suddenly thrown on or off The governor of the engine has been tested on the fuel bed and was found to work satisfactorily

Generators, do they comply with the requirements regarding rating are they compound wound

Are they over compounded 5 per cent. if not compound wound state distance between each generator

Is an adjustable regulating resistance fitted in series with each shunt field Are all terminals accessible, clearly marked, and furnished with sockets

Are they so spaced or shielded that they cannot be accidentally earthed, short circuited, or touched Are the lubricating arrangements of the generators as per Rule

APPROVED PLANS. Are approved plans forwarded herewith for Shafting yes, London letter 8.11.33 Receivers yes, London letter 14.6.32 Separate Tanks Draw. M. 925

ARE GEAR as per Rules.

The foregoing is a correct description.
Maschinenfabrik Augsburg-Nürnberg A.-G.
W. Schreyer Manufacturer.



Dates of Survey while building
 During progress of work in shops - - - Sept. 1933: 18.29.30. Oct. 1933: 3.9.11.12.16.17.23.24.25. Nov. 1933: 2.4.6.7.8.11
 During erection on board vessel - - -
 Total No. of visits

Dates of Examination of principal parts—Cylinders 29.9.33, 8.11.33 Covers 3.10.33, 8.11.33 Pistons 3.10.33, 8.11.33 Piston rods
 Connecting rods 3.10.33 Crank and Flywheel shaft 18.9.33, 8.11.33 Intermediate shaft

Crank and Flywheel shafts, Material S. M. Steel Identification Mark LLOYD'S V.S. 1577 18.9.33
 Intermediate shafts, Material Identification Marks

Is this machinery duplicate of a previous case Yes If so, state name of vessel main engines for G. d. Yron - Sueden just No 74
 Lundel Sueden.

General Remarks (State quality of workmanship, opinions as to class, &c.) This heavy oil engine has been constructed under spec.
 survey in accordance with the Soc. Rules and Regulations as well as with the approved plans and instructions to
 be. The material used in the construction is good and the workmanship is satisfactory.
 The engine has been tested on the makers test bed during 8 hours incl. 2 hours 10% overload in the presence of the
 designer and was found to work satisfactorily.
 In my opinion the vessel for which this engine is intended will be eligible for the notation of $\frac{3}{4}$ LMC (with date)
 when the whole machinery has been fitted on board and tried under full working conditions.
 A copy of this report has been sent to the Yreuna surveyors

1m, 9, 28 - Transfer. (The Surveyors are requested not to write on or below the space for Committee Minute.)

The amount of Fee Inclusive. When applied for, See by 15 Sam. to 29.5.34.
 Fee see Please see Secretary's letter to Hamburg Office dated 30.5.33.
 Travelling Expenses (if any) £ When received, L. J. ...
 Hull Rpt. 19. Surveyor to Lloyd's Register of Shipping.

Committee's Minute
 Assigned. See Tri. Rpt. 10408
 JUN 8 1934

