

REPORT ON OIL ENGINE MACHINERY.

No. **14966**

Received at London Office **AUG 23 1937**

Date of writing Report **10th AUG. 1937** When handed in at Local Office **19th AUG. 1937** Port of **GENOA**

Name of vessel **"CELLINA"** Date, First Survey **24/7/36** Last Survey **5/8/37** Number of Visits **36**

Where built **TRIESTE** By whom built **Stabilimento Tecnico** Yard No. **746** When built **1926/5mo**
Type of Engines **FIAT D.L. 646, Solid Injection 2 or 4 stroke cycle 2** Single or double acting **Double**

Where engines made **TURIN** By whom made **FIAT Stab. Grandi Motori** Engine No. **2404** When made **1937**

Boilers made at **TURIN** By whom made **TURIN** Boiler No. **✓** When made **✓**

Indicated Horse Power **4550** Owners **"ITALIA", Soc. Anon. di Nav.** Port belonging to **Venice**

Indicated Horse Power as per Rule **1328** Is Refrigerating Machinery fitted for cargo purposes **✓** Is Electric Light fitted **✓**

Maximum pressure in cylinders **35 kgs/sq.cm.** Diameter of cylinders **640 mm** Length of stroke **1160 mm** No. of cylinders **6** No. of cranks **6**

Mean effective pressure **4.27 kgs/sq.cm.** Mean effective pressure **4.27 kgs/sq.cm.** Is there a bearing between each crank **Yes**

Revolutions per minute **115 to 130** Flywheel dia. **2** Weight **60000 kg.** Means of ignition **Compression** Kind of fuel used **Diesel Oil**

Crank Shaft, dia. of journals **439.9 mm** Crank pin dia. **450 mm** Crank Webs **✓** Thickness parallel to axis **290 mm**

Intermediate Shafts, diameter **336.3 mm** Thrust Shaft, diameter at collars **353 mm**

Screw Shaft, diameter **368.6 mm** As the **tube** shaft fitted with a continuous liner **Yes**

Liner thickness in way of bushes **18.8 mm** Thickness between bushes **14.1 mm** Is the after end of the liner made watertight in the stern tube **Yes**

Is the liner in more than one length are the junctions made by fusion through the whole thickness of the liner **Yes**

Is the space charged with a plastic material insoluble in water and non-corrosive **✓**

Is an approved Oil Gland or other appliance fitted at the after end of the tube **✓**

Length of Bearing in Stern Bush next to and supporting propeller **1600 mm**

Propeller, dia. **4650 mm** Pitch **✓** No. of blades **✓** Material **✓** whether Moveable **✓** Total Developed Surface **✓** sq. feet

Method of reversing Engines **Direct** Is a governor or other arrangement fitted to prevent racing of the engine when detached **Yes** Means of lubrication **✓**

Thickness of cylinder liners **upper 48.25 mm lower 40.75 mm** Are the cylinders fitted with safety valves **Yes** Are the exhaust pipes and silencers water cooled or lagged with conducting material **✓**

If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine **✓**

Is the sea suction provided with an efficient strainer which can be cleared within the vessel **✓**

Can one be overhauled while the other is at work **✓**

No. and Size **✓** How driven **✓**

If so, state what special arrangements are made to deal with this water in addition to the ordinary bilge pumping arrangements **✓**

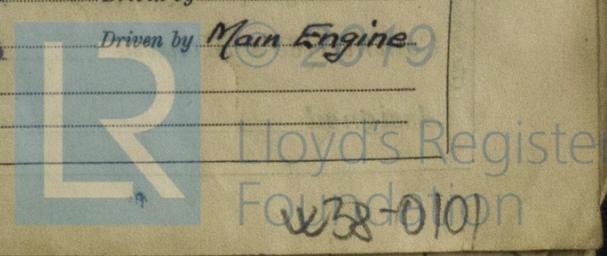
Power Driven Lubricating Oil Pumps, including Spare Pump, No. and size **✓**

Oil Cooler **✓** Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge Pumps, No. and size:—In Machinery Spaces **✓** In Pump Room **✓**

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size **✓**

Are the Bilge Suctions in the Machinery Spaces **✓**

Are the Overboard Discharges above or below the deep water line **✓**



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

Can the internal surfaces of the receivers be examined and cleaned ✓ Is a drain fitted at the lowest part of each receiver ✓

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 ✓ Actual ✓

Starting Air Receivers, No. ✓ Total cubic capacity ✓ Internal diameter ✓ thickness ✓

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

IS A DONKEY BOILER FITTED? ✓ If so, is a report now forwarded? ✓

Is the donkey boiler intended to be used for domestic purposes only? ✓

PLANS. Are approved plans forwarded herewith for Shafting 8/11/35, 21/1/36, 28/2/36 receivers ✓ Separate Tanks ✓

Donkey Boilers ✓ General Pumping Arrangements ✓ Oil Fuel Burning Arrangements ✓

SPARE GEAR.

Has the spare gear required by the Rules been supplied ✓

State the principal additional spare gear supplied

To be placed on board at Trieste

FIAT STABILIMENTO BRANCH MOTORI Il Vice Direttore (ING. ARNALDO FOSAGNOLO)

The foregoing is a correct description,

Faccajudo

Manufacturer.

Dates of Survey while building: During progress of work in shops: 1936 July, 24; Aug. 6, 31; Sept. 5, 17; Oct. 8, 15, 29; Nov. 12, 19, 26; Dec. 3, 17, 28, 30. During erection on board vessel: 1937 Jan. 7, 14, 21, 28; Feb. 7, 11, 18, 25; Mar. 4, 18, 25; Apr. 8, 15, 22, 29; May, 24; June 15; July 1, 8, 28; Aug. 5. Total No. of visits 36

Dates of Examination of principal parts: Cylinders 21/1/37 Covers 26/11/36 Pistons 7/2/37 Rods 28/1/37 Connecting rods 17/12/36

Crank shaft 7/1/37 Flywheel shaft ✓ Thrust shaft 11/2/37 Intermediate shafts 28/7/36 8/9/36 Tube shaft ✓

Screw shaft 6/10/36 Propeller ✓ Stern tube ✓ Engine seatings ✓ Engines holding down bolts ✓

Completion of fitting sea connections ✓ Completion of pumping arrangements ✓ Engines tried under working conditions ✓

Crank shaft, Material S.M. Steel Identification Mark 9547 R. 6. 2. 36 Flywheel shaft, Material ✓ Identification Mark 19474. 19626. 28

Thrust shaft, Material S.M. Steel Identification Mark 403 H.R. 22. 6. 36 Intermediate shafts, Material S.M. Steel Identification Marks 19627. 19684. 19685

Tube shaft, Material ✓ Identification Mark ✓ Screw shaft, Material S.M. Steel Identification Mark 19477. 6. 10. 36

Is the flash point of the oil to be used over 150° F. Yes ✓

Have the requirements of the Rules for oil fuel pipes and tank fittings been complied with ✓

Is the vessel (not being an oil tanker) fitted for carrying oil as cargo ✓ If so, have the requirements of the Rules been complied with ✓

If the notation for Ice Strengthening is desired, state whether the requirements in this respect have been complied with ✓

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

General Remarks (State quality of workmanship, opinions as to class, &c.)

The Machinery of this vessel has been constructed under Special Survey of tested materials and is in accordance with the Secretary's letters, Approved Plans and Rule Requirements.

The materials and the workmanship are good and the engine when tried on the test bed was found to work satisfactorily.

The machinery has now been forwarded to Trieste, where it will be installed on board the M/V "CELLINA", and when this has been carried out the satisfaction of the Society's Surveyors at that Port, the vessel will be eligible, in our opinion, to be classed in the Society's Register Book and to have the notation + N.E. (with date)

Certificate (if required) to be sent to Committee's Minute.

The amount of Entry Fee .. £11 500 : When applied for, 10-7-1937
Special SURVEY FEE £11 9857 :
EXTRA FEE FOR HYD TESTS ... £11 1000 :
Donkey Boiler Fee ...
Travelling Expenses (if any) £11 3000 : 14/2/38

D. H. Griffith & G. C. Ballard
Engineer Surveyors to Lloyd's Register of Shipping.

Committee's Minute

Assigned See Gen 15078