

# REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office 22 OCT 1945

of writing Report *17<sup>th</sup> March 1940* When handed in at Local Office *10* Port of *Amsterdam*  
 in Survey held at *Amsterdam* Date, First Survey *27 April 1939* Last Survey *29 February 1940*  
 Book. *280* on the *S/S. STAD ALKMAAR* (Number of Visits *53*) Tons *Gross 5750*  
*280* at *Rotterdam* By whom built *N.T. Wilton, Eindhoven* Yard No. *669* When built *1940*  
 Engines made at *Amsterdam* By whom made *N.T. Merkspon* Engine No. when made *1940*  
 Boilers made at *Amsterdam* By whom made *N.T. Merkspon* Boiler No. *2070/100* when made *1940*  
 Registered Horse Power *IHP 2700* Owners *Stalijon Lijn N.T.* Port belonging to *Rotterdam*  
 Net Horse Power as per Rule *510* Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted  
 Trade for which Vessel is intended *Ocean Trade*

**GINES, & Co.**—Description of Engines *Triple expansion for ocean going service* Revs. per minute *74*  
 No. of Cylinders *6* Length of Stroke *110 mm* No. of Cranks *3*  
 Crank shaft, dia. of journals *as per Rule approved* Crank pin dia. *38.0 mm* Crank webs Mid. length breadth *72.0* Thickness parallel to axis *24.0*  
 as fitted *38.0 mm* Mid. length thickness *24.0* shrunk Thickness around eye-hole *16.75*  
 Intermediate Shafts, diameter *as per Rule approved* Thrust shaft, diameter at collars *as per Rule approved*  
 as fitted *36.0 mm* as fitted *38.0 mm*  
 Main Shafts, diameter *as per Rule approved* Screw Shaft, diameter *as per Rule approved* Is the *tube* shaft fitted with a continuous liner *yes*  
 as fitted *40.2 mm* as fitted *40.2 mm* Is the screw shaft fitted with a continuous liner *yes*  
 Bronze Liners, thickness in way of bushes *as per Rule approved* Thickness between bushes *as per Rule approved* Is the after end of the liner made watertight in the  
 as fitted *2.8 mm* as fitted *15 mm*  
 Propeller boss *✓* If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner *✓*  
 If the liner does not fit tightly at the part between the bearings in the stern tube, is the space charged with a plastic material insoluble in water and non-corrosive *✓*  
 If two liners are fitted, is the shaft lapped or protected between the liners *✓* Is an approved Oil Gland or other appliance fitted at the after end of the tube  
 If so, state type *✓* Length of Bearing in Stern Bush next to and supporting propeller *1615 mm*  
 Propeller, dia. *5700 mm* Pitch *5050 Lch* No. of Blades *4* Material *brass* whether Moveable *no* Total Developed Surface *118,4* sq. feet  
 Bilge Pumps worked from the Main Engines, No. *2* Diameter *110 mm* Stroke *650 mm* Can one be overhauled while the other is at work *yes*  
 Bilge Pumps worked from the Main Engines, No. *2* Diameter *110 mm* Stroke *650 mm* Can one be overhauled while the other is at work *yes*  
 Bilge Pumps *2* No. and size *2 Weir's 8" x 10 1/2" x 22"* Pumps connected to the *2 - 12" x 10" x 12"*  
 How driven *Steam Driven* Main Bilge Line How driven *Steam Driven*  
 Bilge Pumps, No. and size *2 - 12" x 10" x 12"* Lubricating Oil Pumps, including Spare Pump, No. and size *✓*  
 Are two independent means arranged for circulating water through the Oil Cooler *✓* Suctions, connected to both Main Bilge Pumps and Auxiliary  
 Bilge Pumps;—In Engine and Boiler Room *✓*  
 Holds, &c. *✓*

Main Water Circulating Pump Direct Bilge Suctions, No. and size Independent Power Pump Direct Suctions to the Engine Room Bilges,  
 No. and size *Are all the Bilge Suction Pipes in holds and tunnel well fitted with strum-boxes*  
 Are the Bilge Suctions in the Machinery Space led from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges  
 Are all Sea Connections fitted direct on the skin of the ship Are they fitted with Valves or Cocks  
 Are they fixed sufficiently high on the ship's side to be seen without lifting the stokehold plates Are the Overboard Discharges above or below the deep water line  
 Are they each fitted with a Discharge Valve always accessible on the plating of the vessel Are the Blow Off Cocks fitted with a spigot and brass covering plate  
 That Pipes pass through the bunkers How are they protected  
 That pipes pass through the deep tanks Have they been tested as per Rule  
 Are all Pipes, Cocks, Valves, and Pumps in connection with the machinery and all boiler mountings accessible at all times  
 Is the arrangement of Valves and their connections such as to prevent the possibility of water passing from the sea or from water tanks into the cargo or machinery spaces, or from one  
 compartment to another Is the Shaft Tunnel watertight Is it fitted with a watertight door worked from

**MAIN BOILERS, &c.**—(Letter for record) Total Heating Surface of Boilers *7200*  
 Is Forced Draft fitted *yes* No. and Description of Boilers *3 single ended* Working Pressure *14 kg*  
 IS A REPORT ON MAIN BOILERS NOW FORWARDED? *yes*  
 IS A DONKEY BOILER FITTED? *no* If so, is a report now forwarded? *no*  
 Are approved plans forwarded herewith for Shafting *E 5.4.39* Main Boilers *1-5-39* Auxiliary Boilers *✓* Donkey Boilers *✓*  
 (If not state date of approval) *E 27.1.39* *24.3.39*  
 Superheaters *20.2.1940* General Pumping Arrangements Oil fuel Burning Piping Arrangements

SPARE GEAR. State the articles supplied:—

The foregoing is a correct description,

Manufacturer.



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W290-0023

Dates of Survey while building

During progress of work in shops -- 1939 March 27, April 4-5-10, May 1-30-31, June 5-15-23-30, July 3-5-17-19-20-21-26, Aug. 0-2-5, Sep. 4-23, 25, 29, Oct. 3-12-18-20-25-30, Nov. 1-7-8-16-20-21, Dec. 8-12-14-21-1940 Jan. 4-9-16-24-31, Feb. 6-4m

During erection on board vessel - - -

Total No. of visits

Dates of Examination of principal parts—Cylinders 8-12-39, 19-11-39, 24-1-40 Slides 1-10-39; 16-1-40 Covers 16-1-39; 24-1-40

Pistons 16-1-40; 31-1-40 Piston Rods 16-1-39; 31-1-40 Connecting rods 16-11-39; 24-1-40; 31-1-40

Crank shaft 29-9-39, 20-11-39, 21-1-40 Thrust shaft 18-9-39, 21-11-39, 24-1-40 Intermediate shafts 18-9-39, 21-11-39, 24-1-40

Tube shaft ✓ Screw shaft 13-9-39, 21-11-39, 24-1-40 Propeller

Stern tube 8-8-39 Engine and boiler seatings Engines holding down bolts

Completion of fitting sea connections

Completion of pumping arrangements Boilers fixed Engines tried under steam

Main boiler safety valves adjusted Thickness of adjusting washers

Crank shaft material S M S Identification Mark as per list Thrust shaft material S M S Identification Mark as per list

Intermediate shafts, material S M S Identification Marks as per list Tube shaft, material ✓ Identification Mark ✓

Screw shaft, material S M S Identification Marks as per list Steam Pipes, material Test pressure Date of Test

Is an installation fitted for burning oil fuel Is the flash point of the oil to be used over 150°F.

Have the requirements of the Rules for the use of oil as fuel been complied with

Is the vessel (not being an oil tanker) fitted for carrying oil as cargo no If so, have the requirements of the Rules been complied with ✓

Is this machinery duplicate of a previous case no If so, state name of vessel ✓

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

The engine has been made under special survey in accordance with the approved plans, Society's rules and Secretary's letters. Material duly tested, workmanship throughout good.

The engine has been shipped to Schistom and will be fitted aboard Messrs. Wilton. Tyenond Yard no. 669

Certificate to be sent to  
The Surveyors are requested not to write on or below the space for Committee's Minute.

The amount of Entry Fee	... £ 72 =	When applied for,	19
Special	... £ 965 =	When received,	19
Donkey Boiler Fee	... £ :		
Travelling Expenses (if any)	£ 68,50		

*F. J. Duffley*  
Engineer Surveyor to Lloyd's Register of Shipping.

Committee's Minute  
Assigned *See minute on p. 7th.*

FRI. 11 JAN 1946