

## REPORT ON STEAM RECIPROCATING ENGINE MACHINERY.

Received at London Office 14 APR 1936

Date of writing Report 9. 4. 1936 When handed in at Local Office

19 Port of BREMEN

No. in Survey held at VEGESACK  
Reg. Book.Date, First Survey 13<sup>th</sup> Sept. 1935 Last Survey 26<sup>th</sup> March 1936

50072 on the STEEL SINGLE SC. TANKER

SOCONY

(Number of Visits 44)

Gross 4404

Net 2507

Built at VEGESACK

By whom built BREMER VULKAN

Yard No. 718

When built 1936

Engines made at VEGESACK

By whom made BREMER VULKAN

Engine No. -

When made 1936

Boilers made at VEGESACK

By whom made BREMER VULKAN

Boiler No. 789/780

When made 1936

Registered Horse Power -

Owners STANDARD TRANSPORTATION CO. LTD.

Port belonging to HONGKONG

Nom. Horse Power as per Rule 425

Is Refrigerating Machinery fitted for cargo purposes -

Is Electric Light fitted -

Trade for which Vessel is intended OPEN SEA SERVICE

510

ENGINES, &amp;c. Description of Engines LENTZ STANDARD ENGINE TYPE: L.E.S. II

Revs. per minute 90

Dia. of Cylinders 2 x 570 - 2 x 1100 Z Length of Stroke 1100 Z No. of Cylinders 4

No. of Cranks 4

Crank shaft, dia. of journals as per Rule as fitted 350 Z

Crank pin dia. 350 Z

Crank webs Mid. length breadth -

Thickness parallel to axis 210 Z

Mid. length thickness -

Thickness around eye-hole 165 Z

Intermediate Shafts, diameter as per Rule as fitted 318 Z

Thrust shaft, diameter at collars as per Rule as fitted 335 Z

Tube Shafts, diameter as per Rule as fitted -

Screw Shaft, diameter as per Rule as fitted 364 Z

Is the tube screw shaft fitted with a continuous liner -

Bronze Liners, thickness in way of bushes as per Rule as fitted 18.3 Z

Thickness between bushes as per Rule as fitted 15.5 Z

Is the after end of the liner made watertight in the

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

shaft -

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

Propeller, dia. 4900 Z Pitch 4290 Z No. of Blades 4

Material bronze whether Movable -

Total Developed Surface 79.2 sq. feet

Feed Pumps worked from the Main Engines, No. none

Diameter -

Stroke -

Can one be overhauled while the other is at work -

Bilge Pumps worked from the Main Engines, No. none

Diameter -

Stroke -

Can one be overhauled while the other is at work -

Feed Pumps No. and size 2 - 280 x 200 x 600 Z

Pumps connected to the Main Bilge Line

No. and size one 180 x 160 x 250

How driven steam

Ballast Pumps, No. and size -

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 6 of 80 Z, 1 in well 780 Z

In Pump Room Main P.R. 2 of 60 Z, Vorn. P.R. 2 of 60 Z In Holds, &amp;c. fore hold II deck 2 of 70 Z, Chain locker 1 of 60 Z

Fore Room I deck 1 of 60 Z

Main Water Circulating Pump Direct Bilge Suctions, No. and size 1 of 200 Z

Independent Power Pump Direct Suctions to the Engine Room Bilges,

No. and size 1 of 100 Z 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 -

What Pipes pass through the bunkers -

How are they protected -

What 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, &amp;c. - (Letter for record 5)

Total Heating Surface of Boilers 2 x 300 m<sup>2</sup> = 600 m<sup>2</sup>

Is Forced Draft fitted -

No. and Description of Boilers 2 multitubular Piers Working Pressure 220 lbs

IS A REPORT ON MAIN BOILERS NOW FORWARDED? -

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 -

Main Boilers -

Auxiliary Boilers -

Donkey Boilers -

Superheaters -

General Pumping Arrangements -

Oil fuel Burning Piping Arrangements -

SPARE GEAR.

Has the spare gear required by the Rules been supplied -

State the principal additional spare gear supplied 1 section of crank shaft, 1 propeller shaft, 2 bronze propeller blades, 2 piston rods, 1 set of piston rings of each size, 2 sets of bottom end bearings &amp; bolts, 2 sets of top end bearings &amp; bolts, 2 HP &amp; 2 LP valves with spindles &amp; 6 springs, 1/2 set of pads for main thrust bearing; For all pumps spare sets of suction and discharge valves

The foregoing is a correct description,

Manufacturer.

Bremer Vulkan

Schiffbau und Maschinenfabrik

Habelas

The Register Foundation

W122-0074 1/2

TANKER

SOCONY

## LIST OF PUMPS

No	DESCRIPTION	DRIVEN BY	TYPE	DIMENSIONS	CAPACITY m <sup>3</sup> /h
IN ENGINE ROOM					
1	Main Circulating Pump	Steam	centrifugal	4" diam. imp. 200 700 x 250	600 m <sup>3</sup> /h at 395
1	General Service	"	vert. diaph.	320 x 220 x 300	85 - - - 36 2. stroke
1	Sanitary	"	hor. - -	180 x 160 x 250	45 - - - 45 - -
1	Bridge	"	" - -	180 x 160 x 250	45 - - - 45 - -
1	Condensate	"	" - -	180 x 160 x 250	30 - - - 30 - -
1	Drinking water	"	" - -	150 x 100 x 150	10 - - - 50 - -
2	Feed water	"	vert. diaph.	280 x 220 x 600	20 - - - 10 - -
1	Fuel oil transfer	"	hor. diaph.	180 x 160 x 250	30 - - - 30 - -
2	Fuel oil pressure	"	" - -	150 x 100 x 150	2 - - - 10 - -
2	Feed water injectors	"	" - -	" - -	9500 l/h.
IN MAIN PUMP ROOM					
2	Large oil Pumps	Steam	hor. diaph.	400 x 280 x 450	250 m <sup>3</sup> /h at 45 2. stroke
2	Immersion tanks	"	" - -	320 x 260 x 450	210 - - - 44 - -
1	Stripper	"	vert. - -	320 x 220 x 300	90 - - - 39 - -
1	Bridge	"	" - -	150 x 100 x 150	10 - - - 50 - -
IN FORW. PUMP ROOM					
1	Large oil Pump	Steam	hor. diaph.	400 x 280 x 450	250 m <sup>3</sup> /h at 45 2. stroke
1	Immersion tanks	"	" - -	320 x 260 x 450	210 - - - 44 - -
1	Stripper	"	vert. - -	320 x 220 x 300	90 - - - 39 - -
1	Bridge & Ballast	"	hor. - -	180 x 160 x 250	45 - - - 45 - -
1	Fuel oil transfer	"	" - -	180 x 160 x 250	30 - - - 30 - -

Bremen 9.4.36

A. Carstensen

During progress of work in shops - 1935 Sept. 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31. Nov. 5, 7, 11, 16, 21, 26, 29. Dec. 2, 5, 11, 16, 19, 23, 27.

During erection on board vessel - 1936 Jan. 4, 7, 9, 15, 20, 29. Feb. 5, 11, 15.

Feb. 19, 24, 28. March 3, 6, 9, 12, 14, 16, 17, 21, 24, 26.

Total No. of visits 44

Dates of Examination of principal parts - Cylinders 21.11, 5.12, 16.12.35. Pistons 9.1.36. Piston Rods 29.1.36. Connecting rods 29.1.36. Crank shaft 21.11.35. Thrust shaft 5.2.36. Intermediate shafts 5.2.36. Tube shaft - Screw shaft 5.2.36. Propeller 15.2.36. Stern tube 5.12.36. Engine and boiler seatings 19.2.36. Engines holding down bolts 6.3.36. Completion of fitting sea connections 11.2.36. Completion of pumping arrangements 21.3.36. Boilers fixed 28.3.36. Engines tried under steam 28.3.36. Main boiler safety valves adjusted 24.3.36. Thickness of adjusting washers 29.3.36. Crank shaft material P.M. Steel Identification Mark 14.11.35. Thrust shaft material P.M. Steel Identification Mark 14.11.35. Intermediate shaft material P.M. Steel Identification Mark 14.11.35. Tube shaft material P.M. Steel Identification Mark 14.11.35. Screw shaft material P.M. Steel Identification Mark 14.11.35. Steam Pipes material Steel Test pressure 50 kg/cm<sup>2</sup> Date of Test 9.3.36. Is an installation fitted for burning oil fuel yes. Is the flash point of the oil to be used over 150°F. yes. Have the requirements of the Rules for the use of oil as fuel been complied with yes. Is the vessel (not being an oil tanker) fitted for carrying oil as cargo yes. If so, have the requirements of the Rules been complied with yes. If the notation for Ice Strengthening is desired, state whether the requirements in this respect have been complied with no notation for Ice Strengthening. 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. This machinery has been built under special survey in accordance with the approved plans, the Secretary's letters, and in conformity with the requirements of the Rules. The materials used in the construction are made at works recognized by the Committee and tested by the Port Surveyor. Materials & workmanship are of good quality. During the vessel's 8 hours trial trip all the machinery has been tested under full working & manoeuvring conditions and was found in all parts in order.

The maximum output of the engine was 2665 IHP at 97 rev./min. and a cut off in the HP cylinders of 41% of the stroke, while the vessel was loaded to the maximum draft.

This machinery is eligible in my opinion to be classed in the Port Reg. Book with record of \* LMC 3.36. and notation of Tail Shaft C.L. Boiler pressure 220 lbs. F.D.

The amount of Entry Fee ... RM 100.- : When applied for, Special ... 17.75.- : 9.4.1936 Donkey Boiler Fee ... : When received, Travelling Expenses (if any) 176.- : 29.4.1936

Committee's Minute

TUE. 21 APR 1936

Assigned

+ LMC 3.36 J.D. Ch

Fitted for oil fuel 336 2. Above 150°F.

A. Carstensen  
Engineer Surveyor to Lloyd's Register of Shipping.

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Foundation