

## REPORT ON OIL ENGINE MACHINERY.

No. 14467

Received at London Office

18 NOV 1953

Report 19 When handed in at Local Office 237 19 Port of COPENHAGEN  
Survey held at COPENHAGEN & NAKSKOV Date, First Survey 26/1/53 Last Survey 23<sup>RD</sup> Oct 1953  
Number of Visits

Single ☒ Triple ☒ Quadruple ☒  
Screw vessel M/V "MARGIT"  
Tons Gross 4967 Net 2806

By whom built A/S NAKSKOV SKIBSVÆRFT Yard No. 133 When built 1953

By whom made A/S BURMEISTER & WAIN Engine No. 5051 When made 1953  
EXHAUST GAS - TIPTON STAFFS. WRIGHT'S FORGE AND ENGINEERING CO. LD.

By whom made A/S NAKSKOV SKIBSVÆRFT Boiler No. 45 When made 1953  
MADE AT OIL FIRED - NAKSKOV

Power Maximum 4,100 V Owners DAMPSKIBSSELSKABET "MYREN" Port belonging to COPENHAGEN  
Service

Rule 820 V Is Refrigerating Machinery fitted for cargo purposes No Is Electric Light fitted YES

Which vessel is intended OPEN SEA SERVICE.

NES, &c. Type of Engines DM. 674 VTF-140 CROSS HEAD TYPE  
Solid Injection. 2 or 4 stroke cycle 2 Single or double acting SINGLE  
Pressure in cylinders 50 kg/cm<sup>2</sup> Diameter of cylinders 740 mm Length of stroke 1400 mm No. of cylinders 6 No. of cranks 6  
Rated Pressure 5.8 kg/cm<sup>2</sup> AND FIRING ORDER 1-5-3-4-2-6 Span of bearings (i.e., distance between inner edges of bearings in mm) 948 mm  
Is there a bearing between each crank YES Revolutions per minute Maximum 112 Service 112  
Weight Moment of inertia of flywheel (kg.m<sup>2</sup>) 4000 Means of ignition COMPRESSION Kind of fuel used F.P. ABOVE 150°F  
" " " " balance wts. ( " " " " ) 20,400 kg/m<sup>2</sup>

as per Rule 461 mm Crank pin dia. 520 mm Crank webs Mid. length breadth 1180 mm Thickness parallel to axis 270/320 mm  
as fitted 520 mm 185 mm CENTRE HOLE 185 mm CENTRE HOLE Mid. length thickness 260 mm Thickness around eyehole 295 mm

as per Rule Intermediate Shafts, diameter as per Rule Thrust Shaft, diameter at collars as per Rule  
as fitted 344 mm 500 mm WITH 165 mm CENTRE HOLE

as per Rule Screw Shaft, diameter as per Rule Is the (screw) shaft fitted with a continuous liner YES  
as fitted 380 mm

as per Rule Thickness in way of bushes as per Rule Thickness between bushes as per Rule Is the after end of the liner made watertight in the  
as fitted 22 mm 22 mm

YES V If the liner is in more than one length are the junctions made by fusion through the whole thickness of 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-  
If two liners are fitted, is the shaft lapped or protected between the liners Is an approved Oil Gland fitted at the after

tube No If so, state type Length of bearing in Stern Bush next to and supporting propeller 1970 mm

Dia. 5300 mm Pitch 3869 mm No. of blades 4 Material BRONZE whether moveable No Total developed surface 8.80 m<sup>2</sup>

Moment of inertia of propeller including entrained water (kg.m<sup>2</sup>) 46,450 kg/m<sup>2</sup> Kind of damper, if fitted

Reversing Engines DIRECT REVERSIBLE Is a governor or other arrangement fitted to prevent racing of the engine YES Means of  
FORCED Thickness of cylinder liners 52 mm Are the cylinders fitted with safety valves YES Are the exhaust pipes and silencers water cooled

with non-conducting material LAGGED If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned  
engine 2 OFF-SALT WATER ELECTRIC MOTOR Working F.W. 1

Cooling Water Pumps, No. and how driven 1 ARE - FRESH WATER 1 ARE - FRESH WATER 1 ARE - FRESH WATER

Spare F.W. OR S.W. 1 Is the sea suction provided with an efficient strainer which can be cleared within the vessel YES

Worked from the Main Engines No. and capacity 2 AT 150 MM DIA, 200 MM STROKE Can one be overhauled while the other is at work No

ected to the Main Bilge Line No. and capacity of each 1 AT 200 T/H, 1 AT 40 T/H, 1 AT 20 T/H  
How driven ELECTRIC MOTOR

water led to the bilges No If so, state what special arrangements are made to deal with this water in addition to the ordinary bilge pumping

s, No. and capacity 1 AT 200 T/H Power Driven Lubricating Oil Pumps, including spare pump, No. and size 2 AT 185 M<sup>3</sup>/H

endent means arranged for circulating water through the Oil Cooler YES Branch Bilge Suctions

-In machinery spaces 3 @ 3", 1 @ 5", 1 @ 2 1/2" TUNNEL WELL, 1 @ 2 1/2" ENGINE GRAVE, 1 @ 2 1/2" PIPE TUNNEL, 1 @ 2" COFFERDAM  
N° 1 - 2 @ 3", N° 2 & 3 - 2 @ 3 1/2", N° 4 - 2 @ 3", N° 5 - 2 @ 3", VEG. OIL DEEP TANKS 2 @ 2 1/2", COFFERDAM FR. 11-12 - 1 @ 2", FR 24-25 - 1 @ 2"

Suctions to the engine room bilges, No. and size 1 AT 6" AT STARBOARD SIDE

ge suction pipes in holds and tunnel well fitted with strum-boxes YES Are the bilge suction in the machinery spaces led from easily

l-boxes, placed above the level of the working floor, with straight tail pipes to the bilges YES

connections fitted direct on the skin of the Ship YES Are they fitted with valves or cocks BOTH Are they fixed

h on the ship's side to be seen without lifting the platform plates YES Are the overboard discharges above or below the deep water line BELOW

fitted with a discharge valve always accessible on the plating of the vessel YES Are the blow off cocks fitted with a spigot and brass covering plate YES

iss through the bunkers NONE How are they protected

iss through the deep tanks NONE Have they been tested as per Rule

cocks, valves and pumps in connection with the machinery and all boiler mountings accessible at all times YES

ment 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

one compartment to another YES Is the shaft tunnel watertight YES Is it fitted with a watertight door YES worked from ON BOARD DECK

el, what means are provided to prevent leakage of either fuel oil or of lubricating oil from saturating the woodwork

Compressors, No. No. of stages diameters stroke driven by

Air Compressors, No. 3 - 2 CYL No. of stages 2 diameters 130/115 mm stroke 120 mm driven by ELECTRIC MOTOR

iliary Air Compressors, No. 1 CAPACITY 9 M<sup>3</sup>/HR diameters stroke driven by OR MANUAL

vision is made for first charging the air receivers SMALL AUX. COMPRESSOR ARRANGED FOR MANUAL OPERATION IF REQUIRED

ing Air Pumps or Blowers, No. Two How driven BY MAIN ENGINE

Engines Have they been made under survey YES Engine Nos. 5052-53-54

Makers name A/S BURMEISTER & WAIN Position of each in engine room FLOOR LEVEL - 2 AT PORT SIDE

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004003 - 004008 - 0078



RECEIVERS:—Have they been made under survey YES State No. of report or certificate. COPENHAGEN  
the full details of safety devices FUSIBLE PLUG

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

Injection Air Receivers, No. — Cubic capacity of each — Internal diameter — thickness —

Seamless, welded or riveted longitudinal joint — Material — Range of tensile strength — Working pressure —

Starting Air Receivers, No. ONE Total cubic capacity 18 M<sup>3</sup> Internal diameter 1854 MM thickness 24

Seamless, welded or riveted longitudinal joint RIVETTED Material S.M. STEEL Range of tensile strength 31.1-33.3 Working pressure —

IS A DONKEY BOILER FITTED YES-TWO If so, is a report now forwarded YES

Is the donkey boiler intended to be used for domestic purposes only FOR DOMESTIC PURPOSES & STEAM HEATING TO COILS IN

PLANS. Are approved plans forwarded herewith for shafting YES Receivers YES Separate —

EXM GAS BOILER- SEE BIRMINGHAM RPT. 160 (If not, state date of approval) Donkey boilers YES-OIL FIRED BOILER General pumping arrangements YES Pumping arrangements in machinery space —

Oil fuel burning arrangements —

Have Torsional Vibration characteristics been approved YES Date and particulars of approval 1/23/4/52

SPARE GEAR.

Has the spare gear required by the Rules been supplied YES State if for "short voyages" only NO

State the principal additional spare gear supplied 1-BRONZE PROPELLER; 1-SCREW SHAFT; 1-CYL LINER; 2

1- PISTON ROD; 1- PISTON; 4- EXHAUST VALVES.

The foregoing is a correct description, [Signature]

Manufacturer.

Dates of Survey while building  
During progress of work in shops - 26/1-24/2-23/2-25/2-2/3-3/3-6/3-7/3-9/3-10/3-17/3-20/3-21/3-25/3-28/3-7/4-11/4-13/4-14/4-15/4-16/4  
During erection on board vessel - 23/4-27/4-25/4-28/4-8/5-9/5-13/5-18/5-19/5-20/5-21/5-27/5-29/5  
Total No. of visits 57

Dates of examination of principal parts—Cylinders 17/4/53 Covers 14/4/53 Pistons 22/4/53 Rods 23/4/53 Connecting

Crank shaft 15/4/53 Flywheel shaft — Thrust shaft 23/4/53 Intermediate shafts 17/6/53 Tube shaft

Screw shaft 17/6/53 Propeller 17/6/53 Stern tube 13/5/53 Engine seatings 13/8/53 Engine holding down bolts

Completion of fitting sea connections 7/7/53 Completion of pumping arrangements 20/10/53 Engines tried under working conditions

Crank shaft, material PINS & JOURNALS-S.M.I.S. Identification mark RET HALF- 9475 Flywheel shaft, material — Identification mark —

Thrust shaft, material S.M.I. STEEL Identification mark 9474 Intermediate shafts, material S.M.I. STEEL Identification mark —

Tube shaft, material — Identification mark — Screw shaft, material S.M.I. STEEL Identification mark —

Identification marks on air receivers Nº 1187 LLOYDS TEST 41 ATMOS. W.P. 25 ATMOS. K.H. 25-6-53

Welded receivers, state Makers' Name —

Is the flash point of the oil to be used over 150°F YES. ✓ (The main engine is fitted to burn high viscosity fuel)

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

Full description of fire extinguishing apparatus fitted in machinery spaces BATTERY OF 52 BOTTLES OF CO<sub>2</sub> AT 30KG EACH; 2000 LITRE FOAM. PORTABLE EXT. - 10 45 LITRE FOAM, 70 9 LITRE FOAM, VEGETABLE OIL

Is the vessel (not being an oil tanker) fitted for carrying oil as cargo IN DEEPTANK No, have the requirements of the Rules been complied with —

What is the special notation desired —

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 NO If so, state name of vessel —

General Remarks (State quality of workmanship, opinions as to class, Speed restrictions, &c. The machinery has been

and installed under Special Survey, and in Accordance with the Rules, the

plans, and the Secretary's letters.

The material has been tested as required by the Rules, and the workmanship

The whole installation has been examined under full power conditions dur-

trial, and found in efficient condition, and is eligible in my opinion to be

the Notations of P.L.M.C. 10, 53; Oil Engine; C.L; 2 DBs. 100 lbs.

Interim certificate issued - copy attached.

NAKSKOV. B&W.

ENTRY- Kr. 2220 Kr. 3840

FORCINGS. — Kr. 880

AIR RECEIVER Kr. 200

Special — Kr. 650

COOLERS & PUMPS —

Donkey Boiler Fee Kr. 568

Travelling Expenses (if any) —

Committee's Minute —

Assigned —

The Surveyors are requested to write on or below the space for Committee's Minute.

Certificate (if required) to be sent to

The Surveyors are requested to write on or below the space for Committee's Minute.

Assigned

The Surveyors are requested to write on or below the space for Committee's Minute.