

pt. 4b
of writing report 15.2.60.
Received London
Port HELSINGFORS
No. 7311
In shops 78
11.12.58
No. of visits
On vessel 78
First date
Last date 12.11.59
Vasa

IRST ENTRY REPORT ON INTERNAL COMBUSTION MACHINERY

n R.B. 19598 Name "LENINGRAD" Gross tons 9425,2
ers. U.S.S.R. Managers Wartsilä-koncernen Ab, Port of Registry Murmansk
built at Helsingfors By Sandvikens Skeppsdocka. Yard No. 366 Year Month 1961-11
n Engines made at Vasa By Wartsilä-koncernen Ab, Eng. No. 185 When 1959
ring made at By
key boilers made at By Blr. Nos. When
chinery installed at By When

iculars of restricted service of ship, if limited for classification
iculars of vegetable or similar cargo oil notation, if required
ip to be classed for navigation in ice? Is ship intended to carry petroleum in bulk?
refrigerating machinery fitted? If so, is it for cargo purposes? Type of refrigerant
e refrigerating machinery compartment isolated from the propelling machinery space? Is the refrigerated cargo installation intended to be classed?

following particulars should be given as fully and as clearly as possible. Where the answer is "No" or "None", say so! Ticks and other signs of doubtful meaning are not to be used. Where the
ding is not applicable to the installation, a black line may be inserted. If the main engines have been constructed at another port and are covered by a separate report, the particulars given in that
ort need not be repeated below, but the port and report number should be stated.

f Ship, of main engines No. of propellers Brief description of propulsion system Diesel Electric

AIN RECIPROCATING ENGINES. Licence Name and Type No. Wartsilä-Sulzer 9 MH 51/55

. of cylinders per engine 9 Dia. of cylinders 510 mm stroke(s) 550 mm 2 or 4 stroke cycle 2 Single or double acting single

aximum approved BHP per engine 3250 at 330 RPM of engine and RPM of propeller.

rresponding MIP 5,3 kg/cm² (For DA engines give MIP top & bottom) Maximum cylinder pressure 65 kg/cm² Machinery numeral

e the cylinders arranged in Vee or other special formation? no If so, number of crankshafts per engine -

VO STROKE ENGINES. Is the engine of opposed piston type? no If so, how are upper pistons connected to crankshaft? -

the exhaust discharged through ports in the cylinders or through valve(s) in the cylinder covers? ports in cyl. No. and type of mechanically driven scavenge pumps or blowers per

ine and how driven 9 lever driven scavenge Pumps (piston pumps)

. of exhaust gas driven scavenge blowers per engine - Where exhaust gas driven blowers only are fitted, can the engine operate with one blower out of action?

a stand-by or emergency pump or blower is fitted, state how driven No. of scavenge air coolers Scavenge air pressure at full

ver. Are scavenge manifold explosion relief valves fitted?

OUR STROKE ENGINES. Is the engine supercharged? Are the undersides of the pistons arranged as supercharge pumps? No. of exhaust gas driven blowers per

ine No. of supercharge air coolers per engine Supercharge air pressure Can engine operate without supercharger?

VO & FOUR STROKE ENGINES-GENERAL. No. of valves per cylinder: Fuel 1 Inlet - Exhaust - Starting 1 Safety 1

aterial of cylinder covers cast steel Material of piston crowns Forged steel Is the engine equipped to operate on heavy fuel oil? no

olting medium for : Cylinders fresh water Pistons oil Fuel valves fresh water Overall diameter of piston rod for double acting engines

the rod fitted with a sleeve? - Is welded construction employed for: Bedplate? no Frames? no Entablature? no Is the crankcase separated from the

erside of pistons? no Is the engine of crosshead or trunk piston type? trunk Total internal volume of crankcase 8,5 m³ No. and total area of explosion relief

ices 9x250cm²=2250cm² Are flame guards or traps fitted to relief devices? no Is the crankcase readily accessible? yes If not, must the engine be removed for

rrhaul of bearings, etc? - Is the engine secured directly to the tank top or to a built-up seating? How is the engine started? by air

n the engine be directly reversed? no If not, how is reversing obtained? no reversing required

s the engine been tested working in the shop? yes How long at full power? 8 hours

ANK & FLYWHEEL SHAFTING. Date of approval of torsional vibration characteristics of the propelling machinery system 16.4.57 23.4.57 State barred speed range(s), if imposed

working propeller For spare propeller Is a governor fitted? yes Is a torsional vibration damper or detuner fitted to the shafting? no

ere positioned? Type No. of main bearings 11 Are main bearings of ball or roller

e? no Distance between inner edges of bearings in way of crank(s) 570 mm Distance between centre lines of side cranks or eccentrics of opposed piston engines -

0: inkshaft type: Built, semi-built, solid. (State which) solid

imeter of journals 310 mm Diameter of crankpins 310 mm Breadth of webs at mid-throw 450 mm Axial thickness of webs 163 mm

hrunk, radial thickness around eyeholes Are dowel pins fitted? Crankshaft material Journals Pins Minimum

meter of flywheel 2 Weight Are balance weights fitted? Total weight Radius of gyration

meter of flywheel shaft Material Minimum approved tensile strength

heel shaft: separate, integral with crankshaft, integral with thrustshaft. (State which) Integral with crankshaft

012705-012710-0101¹/₂

GENERAL REMARKS

State if the machinery has been constructed and/or installed under special survey in accordance with the Rules, approved plans and Secretary's letters. State quality of materials and workmanship recommendations for classification, including any special notation to be assigned. Where existing machinery is submitted for classification the circumstances should be explained as fully as

This Diesel Engine has been constructed under Special Survey in accordance with the Rules, approved plans and Secretary's letters. Quality of materials and workmanship found good.

A. M. New
Engineer Surveyor to Lloyd's Register of Ships

PARTICULARS OF IDENTIFICATION MARKS ((Including Port of origin) of important Forgings and Castings. (Copies of certificates should be forwarded with report.)

RODS Lloyd's DSF HS 117 4.9.58 (1 pice) Lloyd's DSF HS 121 4.9.58 (3 pice) Lloyd's DSF HS 116 4.9.58 (1 pice)
Lloyd's DSF HS 119 4.9.58 (1 pice)

CRANKSHAFT OR ROTORSHAFT

FLYWHEEL SHAFT Lloyd's KLN AS 553 27.11.58 Lloyd's KLN AS 509 27.11.58

THRUSTSHAFT

GEARING

INTERMEDIATE SHAFTS

SCREW AND TUBE SHAFTS

PROPELLERS

OTHER IMPORTANT ITEMS

Is the installation a duplicate of a previous case? yes If so, state name of vessel Yard No. 365. Report No. 6968

Date of approval of plans for crankshaft 6.10.55 Straight shafting Gearing Clutch

Separate oil fuel tanks Pumping arrangements Oil fuel arrangements

Cargo oil pumping arrangements Air receivers Donkey boilers

Dates of examination of principal parts:—

Fitting of stern tube Fitting of propeller Completion of sea connections Alignment of crankshaft in main bearings

Engine chocks & bolts Alignment of gearing Alignment of straight shafting Testing of pumping arrangements

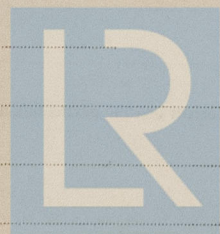
Oil fuel lines Donkey boiler supports Steering machinery Windlass

Date of Committee 16 FEB 1962 Special Survey Fee Fmk. 267.00

Decision Su Hf 8382

Expenses Fmk. 9.20

Date when A/c rendered 14.1.1960.



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