

REPORT ON OIL ENGINE MACHINERY.

No. 1884

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Surveying Report 18th June 52 When handed in at Local Office 19 Port of HAMBURG

Survey held at Elmshorn Date, First Survey 10th May 1951 Last Survey 18th April 191952.

on the Single Screw vessel Motor Tanker " I S E B E K " Tons Gross 497.95 Net 270

Elmshorn By whom built D.W. Kremer Sohn Yard No. 1001 When built 1952

made at Kiel By whom made Maschinenbau Kiel A.G. Engine No. 15187 When made 1951

Boilers made at Kreuztal/Westf. By whom made Schaubstahlwerke Boiler No. 20577 When made 1952

Power { Maximum 520 Owners Knöhr & Burchard NfL. Port belonging to Hamburg

Rule 104 Is Refrigerating Machinery fitted for cargo purposes no Is Electric Light fitted yes

which vessel is intended International

INES, &c. Type of Engines M.A.K. 423 2 or 4 stroke cycle 4 Single or double acting single

Pressure in cylinders Diameter of cylinders Length of stroke No. of cylinders 8 No. of cranks 8

rated Pressure Span of bearings (i.e., distance between inner edges of bearings in

ank) Is there a bearing between each crank Revolutions per minute { Maximum Service

Weight Moment of inertia of flywheel (lbs. in² or Kg. cm.²) Means of ignition Comp. Kind of fuel used diesel

Weight " " " balance wts. (" " " " ")

olid forged dia. of journals as per Rule Crank pin dia. Crank webs Mid. length breadth Thickness parallel to axis

emi built dia. of journals as fitted Crank pin dia. Crank webs Mid. length thickness shrunk Thickness around eyehole

shaft, diameter as per Rule at Flexible Coupling Intermediate Shaft, diameter as fitted 138 mm Thrust Shaft, diameter at collars as fitted part of reduction gear Dr. No. 2207

t, diameter as per Rule Screw Shaft, diameter as fitted 168.5/190 mm Is the { tube screw } shaft fitted with a continuous liner { no

ers, thickness in way of bushes as per Rule Thickness between bushes as fitted Is the after end of the liner made watertight in the

oss If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner

r 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

n tube no If so, state type Zeise, Type "S" Length of bearing in Stern Bush next to and supporting propeller 555 mm

dia. 2300 mm Pitch No. of blades 4 Material Bronze whether moveable solid Total developed surface 1.81 sq. m

inertia of propeller including entrained water (lbs. in² or Kg. cm.²) as approved Kind of damper, if fitted friction

reversing Engines direct Is a governor or other arrangement fitted to prevent racing of the engine yes Means of

forced Thickness of cylinder liners Are the cylinders fitted with safety valves yes Are the exhaust pipes and silencers water cooled

with non-conducting material yes If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned

engine Cooling Water Pumps, No. and how driven 2 - 1 ME & 1 E-Driven Working F.W. no

ne Spare F.W. S.W. one Is the sea suction provided with an efficient strainer which can be cleared within the vessel yes

ps worked from the Main Engines, No. and capacity 1 (18 cub. metres p. hr.) Can one be overhauled while the other is at work

ected to the Main Bilge Line No. and capacity of each 1 x 18 cub. m/hr., 1 x 40 cub. m/hr., & 1 - 50 mm. M.E. driven Elec. driven Hand pump

ng 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

nts 1 - 40 cub. m/hr. Power Driven Lubricating Oil Pumps, including spare pump, No. and size 2 - 8.6 and 5 cub. m/hr.

dependent means arranged for circulating water through the Oil Cooler yes Branch Bilge Suctions 2

e: In machinery spaces 2 x 70 mm bore In pump room 1 - 50 mm bore hand pump

Fore peak store 2 x 70 mm bore, chain locker 1 x 70 mm bore.

ge Suctions to the engine room bilges, No. and size 1 x 70 mm and 1 x 80 mm

bilge suction pipes in holds and tunnel well fitted with strum-boxes none Are the bilge suction in the machinery spaces led from easily

nud-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 valves and cocks Are they fixed

high on the ship's side to be seen without lifting the platform plates no Are the overboard discharges above or below the deep water line above

ich 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

s pass through the bunkers none How are they protected

s pass through the deep tanks Have they been tested as per Rule

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

ngement 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

from one compartment to another yes Is the shaft tunnel watertight none Is it fitted with a watertight door worked from

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

Compressors, No. one No. of stages two diameters 100/110 stroke 60 driven by E.D.

Air Compressors, No. one No. of stages two diameters 120/108 stroke 70 mm driven by Main Eng.

exterior Air Compressors, No. one No. of stages two diameters - stroke - driven by hand

ovision is made for first charging the air receivers by hand compressor

ng Air Pumps or Blowers, No. How driven

y Engines Have they been made under survey yes Engine Nos. 90494 Port side aft

Makers name Motorenwerke Mannheim Position of each in engine room Angsburg 88 Report No. 010037.010045-0063

AIR RECEIVERS:—Have they been made under survey yes State No. of report or certificate 2860, 1976, 1
State full details of safety devices spring loaded safety valves
Can the internal surfaces of the receivers be examined and cleaned yes Is a drain fitted at the lowest part of each receiver
~~Report on~~ Air Receivers, No. - Cubic capacity of not Internal diameter - thickness -
Seamless, welded or riveted longitudinal joint - Material - Range of tensile strength - Working pressure -
Starting Air Receivers, No. 3 Total cubic capacity 3 x 300 lbs. Internal diameter 446 mm thickness 12 mm
Seamless, welded or riveted longitudinal joint seamless Material S.M. steel Range of tensile strength - Working pressure 36
IS A DONKEY BOILER FITTED yes If so, is a report now forwarded Düsseldorf Interim Cert. dated 22-4-
Is the donkey boiler intended to be used for domestic purposes only no (No. 18)
PLANS. Are approved plans forwarded herewith for shafting yes Receivers no Separate fuel no
(If not, state date of approval)
Donkey boilers no General pumping arrangements yes Pumping arrangements in machinery space yes
Oil fuel burning arrangements yes
Have Torsional Vibration characteristics been approved yes Date and particulars of approval 24-4-51
SPARE GEAR.
Has the spare gear required by the Rules been supplied yes State if for "short voyages" only no, International
State the principal additional spare gear supplied

The foregoing is a correct description,

Manufacturer.

Dates of Survey while building
During progress of work in shops - -
During erection on board vessel - -
Total No. of visits 30
Dates of examination of principal parts—Cylinders May 10, Oct. 24, Nov. 2, 10, 14, 23, 27, Dec. 4, 11, 14, 21, 18, 1951, Jan. 3, 11, 16
Covers Feb. 2, 11, 14, 21, 26, Mar. 4, 12, 20, 23, Apl. 2, 4, 15, 17, 18, 1952
Pistons - Rods - Connecting rods -
Crank shaft - Flywheel shaft - Thrust shaft Part of Reduction gear between crankshaft and
Screw shaft 11-7-51/6-10-51 Propeller 15-10-51/14-11-51 Stern tube 26-9-51 Engine seatings 21-12-51 Engine holding down bolts 28
Completion of fitting sea connections 10-11-51 Completion of pumping arrangements 4-3-52 Engines tried under working conditions 1
Crank shaft, material S.M. Steel Identification mark M.B. 854 Reduction gear No. 45022 HB Identification mark -
Thrust shaft, material Part of red. gear Identification mark - betw. crankshaft & coupling S.M. Steel Identification marks -
Tube shaft, material - Identification mark - Screw shaft, material S.M. Steel Identification mark -
Identification marks on air receivers No. 118/2 No. 118/6 No. 117/4
10-10-51 H.D. 6-11-51 H.D. 10-10-51 H.D.
Welded receivers, state Makers' Name -
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 yes
Full description of fire extinguishing apparatus fitted in machinery spaces Steam smothering, flooding, chemical
Is the vessel (not being an oil tanker) fitted for carrying oil as cargo tanker If so, 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 yes
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.) This heavy oil engine was cons
under special Survey in conformity with the Society's Rules as reported in the Kiel Report No. 418.
Materials and workmanship are good. It has been properly installed in the above vessel, examined und
working conditions and found good. Gear hammer was noted in reduction gear up to 140 R.P.M. -
Notice board fitted at control station stating that the engine is not to be operated continuously below
140 R.P.M., and engine, tachometer marked accordingly. The Machinery is eligible to be classed with rec
+ LMC 4.52 and TS, Oil engine 4 S.C.S.A. 8 cylinders 11 13/32" - 16 17/32" - 104 MN (Brake Horse pow

The amount of Entry Fee ... £
Special ... £ DM 280.- When applied for 19
Donkey Boiler Fee... £ Dm 150.- When received 19
Travelling Expenses (if any) £
FRI. 22 AUG 1952

Committee's Minute

Assigned + LMC 4.52 Oil Eng. (with torsional endorsement)
DB 128/b

Engineer Surveyor to Lloyd's Register of

Lloyd's Register
Foundation