

of writing report. JUN 23 1959

Received London

Port..... Kobe

No. FE6518

held at Innoshima, Japan

No. of visits 40

First date 16th Oct., 1958 Last date 4th June, 1959.

FIRST ENTRY REPORT ON AUXILIARY INTERNAL COMBUSTION ENGINES

Type of Ship..... Motor Fishing Boat.....		Owners..... V.O. SUDOIMPORT, MOSCOW, U.S.S.R.	
Contract No. if name unknown).....		(Or Consignees).....	
Built at..... Mukaishima, Japan	by..... Hitachi S.B. & E. Co., Ltd.	when..... 6-1959	Yard No. 3873
..... Hitachi S.B. & E. Co. Ltd.
..... Innoshima Shipyard	when..... 2-1959	Eng. Nos. 5154 5155
.....
No. of sets and description (including type name)..... 2 off, Hitachi B&W 420-MTH-30 Heavy Oil Trunk Piston Solid Injection			

INTERNAL COMBUSTION RECIPROCATING ENGINES. No. of cylinders per engine 4 Dia. of cylinders 205 mm Stroke 300 mm
at stroke cycle 4 Maximum approved BHP 140 at 600 RPM Corresponding MIP 7 kgs/cm² Maximum pressure 55 kgs/cm²
Heavy Oil Are cylinders arranged in Vee or other special formation? No If so, No. of
shafts per engine - Is engine of opposed piston type? No No. and type of mechanically driven scavenge pumps or blowers
engine None No. of exhaust gas driven blowers or superchargers per engine None Is welded construction
for: Bedplate? No Entablature? No Total internal volume of crankcase (if 20 cu. ft. or over) 1 m³ No. and total area of
crankcase explosion relief devices 1 x 181.5 cm² Are flame guards or traps fitted? Yes Cooling medium for: Cylinders Fresh Water
No. of attached pumps: F.W. cooling None S.W. cooling None Lubricating oil 1 How is engine started?
by compressed air

FITTING. Is a damper or detuner fitted? No No. of main bearings 5 Are bearings of ball or roller type? No Distance between
 edges of bearings in way of cranks. 264 mm Crankshaft: Both, semi-built, solid Material of crankshaft: Web & Pin, Journal Cast Steel Forged Steel Approved
 Min. tensile strength 44 kgs/mm² Dia. of pins 135 mm Journals 135 mm Breadth of webs at mid throw 232 mm Axial
 thickness 76 mm If shrunk, radial thickness around eyeholes 63 mm Dia. of flywheel 1,250 mm Weight 830 kgs Are balance
 weights fitted? Yes Total weight 795 kgs Rad. of gyration 135 mm Dia. of flywheel shaft -
 Has each engine been tested in shop? Yes How long at full power? 4 hours Was it tested with driven machinery attached? Yes Was the
 running tested and found satisfactory? Yes Date of approval of torsional vibration characteristics (for engines of 150 BHP and over) - 17.2.58
 Date of approval of shafting 17, Feb. 1958 Identification marks on shafting For E.No.5154; LLOYD'S KOB No.30021-1 to 4 SH LR 5-12-58
 Particulars of driven machinery 1 off, Drip proof, Selfventilating, Compound Wound, D.C. Generator, 75 K.W. at 600 R.P.M. For E.No.5155; LLOYD'S KOB No.30022-1 to 4 SH LR 15-12-58 4

Kobe Cert. No. AR-30049

LIAIRY GAS TURBINES.

BHP per set.....	At	RPM of output shaft. Open or closed cycle?.....
igement of turbines.	HP drives.....at	RPM HP gas inlet temp.....pressure.....
all diagram should be d showing gas cycle)	IP "at	" IP " " " " "
	LP "at	" LP " " " " "
f air compressors per set.....	Centrifugal or axial flow type?.....	Material of turbine blades.....
rial of compressor blades.....	No. of air coolers per set.....	No. of heat exchangers per set..... How are
les started?.....	Are the turbines operated in conjunction with free piston gas generators?.....	
No. of free piston gas generators.....	Dia. of working pistons.....	Dia. of compressor pistons..... No. of double strokes
minute at full power.....	Gas delivery pressure.....	Gas delivery temperature.....
the turbines and attached equipment been tested in shop?.....	How long at full power?.....	Were they tested with driven machinery
ed?.....	Particulars of gearing.....	
of approval of plans.....	Identification marks.....	Particulars of driven machinery.....

TRIC GENERATORS. Port and No. of Certificate for generators ~~of 100 Kw. and over~~ Kobe Cert. Nos M-54108
generators under 100 Kw., has Makers' Certificate been obtained? - Are Certificates attached? -

foregoing description is correct ~~and the particulars were as approved for torsional vibration characteristics~~ (strike out words not applicable)

HITACHI SHIPBUILDING & ENGINEERING CO., LTD. *Manufacturer*
INNOSHIMA SHIPYARD

machinery duplicate of a previous case? Yes If so, which? Eng. Nos. 5124 & 5125 for M.T. "ARTHUR MAERSK"
Eng. Nos. 5152 & 5153 for M.V. "DNEPR"

GENERAL REMARKS. *State if the machinery has been constructed under special survey in accordance with the Rules, approved plans and Secretary's letters. quality of materials and workmanship. Where existing machinery is submitted for classification the circumstances should be explained as fully as possible.*

These machines have been constructed under Special Survey in accordance with the Rules, Approved Plans and Secretary's Letters.

The material and workmanship are good.

On completion these machines have been examined under full working conditions at shop and found satisfactory.

Fee.....

es

When a/c rendered.

ation to be signed by Surveyor at fitting-out Port:— The above described machinery has been fitted on board the Motor Fishing Boat
Kaishima, Japan in a proper manner and found satisfactory when tested on the (date) 6th May, 1959 under full working conditions.

Engineer Surveyor to Lloyd's Register