

Report on Steam Turbine Machinery.

No. F. 25

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of writing Report 28.12.1955 When handed in at Local Office 28.12.1955 Port of Rouen
 in Survey held at PARIS Date, First Survey 6.4.54 Last Survey 11.2.55 19
 Book (Number of Visits 7)

on the Single Twin Triple Quadruple Screw Vessel OIL TANKER "ISOCARDIA"
 at St-Nazaire By whom built Ats. & Ch. de Penhoet Yard No. 9.15 When built 1955
 made at Paris By whom made Maison Breguet Turbine Engine No. 2355/6 When made 1955
 ers made at By whom made Boiler No. When made
 ft Horse Power { Maximum Owners Port belonging to
 as per Rule Service Is Refrigerating Machinery fitted for cargo purposes Is Electric Light fitted
 le for which Vessel is intended

AM TURBINE ENGINES, &c.—Description of Engines Two sets of single reduction geared steam turbines
 of Turbines One Direct coupled, Alternator
 geared to { single reduction geared to propelling shafts No. of primary pinions to each set of reduction gearing One
 auxiliary { Alternating Current Generator 3 phase 60 periods per second rated 550 Kilowatts 440 Volts at 1200 revolutions per minute;
 applying power for driving machy. Propelling Motors Type
 Kilowatts Volts revolutions per minute Direct coupled, single or double reduction geared to propelling shafts

TURBINE	H. P.	I. P.	L. P.	ASTERN.
INDIC.				
No. of rows	8	-	-	-
No. of stages				
No. of rows in each stage				

Horse Power at each turbine 550 KW. Revolutions per minute, at full power, of each Turbine Shaft 7890 1st reduction wheel 1200
 main shaft

Shaft diameter at journals in m/m 60 Pitch Circle Diameter 1st pinion 108.48 1st reduction wheel 713.195 Width of Face 1st reduction wheel 233.8
 2nd pinion main wheel

Distance between centres of pinion and wheel faces and the centre of the adjacent bearings 1st pinion 1st reduction wheel
 2nd pinion main wheel

Pinion diameter at bearings 1st 40 Pinion Shafts, diameter at bearings External 1st 75 2nd 59 diameter at bottom of pinion teeth 1st 103.755
 2nd

Shafts, diameter at bearings 1st 130 diameter at wheel shroud, 1st 668 Generator Shaft, diameter at bearings
 main Propelling Motor Shaft, diameter at bearings

Intermediate Shafts, diameter as per rule as fitted Thrust Shaft, diameter at collars as per rule as fitted

Shaft, diameter as per rule as fitted Screw Shaft, diameter as per rule as fitted Is the { tube } shaft fitted with a continuous liner { screw }

Liners, thickness in way of bushes as per rule as fitted Thickness between bushes as per rule as fitted Is the after end of the liner made watertight in the
 liner boss. If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner.

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.
 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

If so, state type Length of Bearing in Stern Bush next to and supporting propeller.
 Pitch No. of Blades. State whether Moveable. Total Developed Surface square feet.

Can the H.P. or I.P. Turbines exhaust direct to the
 No. of Turbines fitted with astern wheels. Feed Pumps { No. and size How driven }

connected to the Main Bilge Line { No. and size How driven }

Pumps, No. and size Lubricating Oil Pumps, including Spare Pump, No. and size.
 independent means arranged for circulating water through the Oil Cooler. Branch Bilge Suctions, No. and size:—In Engine
 In Pump Room

Water Circulating Pump Direct Bilge Suctions, No. and size. Direct Bilge Suctions to the Engine and/or Boiler Room
 No. and size. Are all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes.

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.
 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
 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
 plate. What pipes pass through the bunkers. How are they protected.

Pipes pass through the deep tanks. Have they been tested as per rule.

Pipes, Cocks, Valves and Pumps in connection with the machinery and all boiler mountings accessible at all times.

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
 or from one compartment to another. Is the Shaft Tunnel watertight. Is it fitted with a watertight door. worked from

RS, &c.—Total Heating Surface of Boilers. No. and Description of Boilers. Working Pressure.
 Draught fitted. port on Main Boilers now forwarded?

Is { a Donkey } Boiler fitted? If so, is a report now forwarded?
{ an Auxiliary }
Is the donkey boiler intended to be used for domestic purposes only
aux. turbine
Plans. Are approved plans forwarded herewith for Shafting 4.6.54 Main Boilers Auxiliary Boilers Donkey Boilers
(If not, state date of approval)
Superheaters General Pumping Arrangements Oil Fuel Burning Arrangements
Geared turbines } Have torsional vibration characteristics of system been approved Date of approval
situated aft. }

SPARE GEAR.

Has the spare gear required by the Rules been supplied Yes.
State the principal additional spare gear supplied
Carbon packing and springs for steam glands, Governor parts including ball bearings, etc....

MAISON BREGUET.
DESMARIS R.

Manufacturer.

The foregoing is a correct description.

Dates of Survey while building During progress of work in shops - - 6.4.54, 11.5.54, 11.6.54, 14.12.54, 21.12.54, 4.2.55, 11.2.55
During erection on board vessel - -
Total No. of visits 7
Dates of Examination of principal parts—Casings 6.4.54 Rotors 21.12.54 Blading 21.12.54 Gearing 11.5.54 & 11.12.54
Wheel shaft 11.5.54 Thrust shaft Intermediate shafts Tube shaft Screw shaft
Propeller Stern tube Engine and boiler seatings Engine holding down bolts
Completion of fitting sea connections Completion of pumping arrangements Boilers fixed Engines tried under steam
Main boiler safety valves adjusted Thickness of adjusting washers
Rotor shaft, Material and tensile strength Alloy steel 95.5 Kg/mm² (min) Identification Mark 494 E.B.
Flexible Pinion Shaft, Material and tensile strength O.H. Steel 76.0 Kg/mm² Identification Mark R24 E.L.G.
Pinion shaft, Material and tensile strength Alloy steel 82.8 Kg/mm² Identification Mark 501 E.B.
; Chemical analysis C 0.325, Si 0.29, Mn 0.45, S 0.007, P 0.002, Cr 0.83, Ni 0.05
If Pinion Shafts are made of special steel state date of approval of chemical analyses, physical properties and heat treatment 4.6.54
1st Reduction Wheel Shaft, Material and tensile strength O.H. Steel 58.2 Kg/mm² Identification Mark E.L.G. LLOYDS
Wheel shaft, Material Identification Mark Thrust shaft, Material Identification Mark
Intermediate shafts, Material Identification Marks Tube shaft, Material Identification Marks
Screw shaft, Material Identification Marks Steam Pipes, Material Test pressure
Date of test Is an installation fitted for burning oil fuel
Is the flash point of the oil to be used over 150°F Have the requirements of the Rules for the use of oil as fuel been complied with
Full description of Fire Extinguishing Apparatus fitted in machinery spaces If so, have the requirements of the Rules been complied with
Is the vessel (not being an oil tanker) fitted for carrying oil as cargo If so, state name of vessel "ISANDA" (Ch. Penhoet "K.15")
If the notation for ice strengthening is desired, state whether the requirements in this respect have been complied with
Is this machinery a duplicate of a previous case Yes

General Remarks. (State quality of workmanship, opinions as to class, &c.)
The above two sets of aux. turbine machinery have been constructed under Special Survey at the works of Maison Breguet, Paris, in accordance with the approved plans, the Secretary's letters and the Society's Rules. The workmanship is good.
They have been dispatched to St-Nazaire for installation in the ship "Q.15".

The amount of Entry Fee ... Ffs. 88.000, When applied for.
Special ... £ : : 28.12.55
Donkey Boiler Fee ... £ : : When received.
Travelling Expenses (if any) Ffs. 19.500, 19.

Committee's Minute FRIDAY 20 JAN 1956

Assigned

Engineer Surveyor to Lloyd's Register of Shipping.



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