

YKA No. 4520

8th May 1930

23 Sept 1924 When handed in at Local Office

No. in Survey held at
Req. Book.

on the ^{Single} Twin ^{Motor} Screw vessel "HIKAWA MARU"

Built at	Yokohama	By whom built	Yokohama Dock Co. Ltd.	Yard No.	177	When built	1927
Engines made at	Leopoldshagen	By whom made	Akt. Burmeister, Wam's maskin og Skibstyggeri	Engine No.	1602 1603	When made	1927
Donkey Boilers made at	Yokohama	By whom made	Yokohama Dock Co. Ltd.	Boiler No.	177	When made	1930
Horse Power	11000	Owners	Nippon Yusen Kaisha	Port belonging to	Tokio		
Horse Power as per Rule	2790 1/8	Is Refrigerating Machinery fitted for cargo purposes	yes	Is Electric Light fitted	yes		
For which vessel is intended	Japan - America.						

Engines, &c.—Type of Engines		Vertical Diesel Oil Engines (Crosshead or 4 stroke cycle)		4 Single or double acting		Double	
Maximum pressure in cylinders	35 kg/cm ²	Diameter of cylinders	680 mm = 26 3/4"	Length of stroke	1600 mm	No. of cylinders	2 X 8
of bearings, adjacent to the Crank, measured from inner edge to inner edge	920 mm	Is there a bearing between each crank	Yes				
Revolutions per minute	110	TURNING		Means of ignition	Air Compression	and of fuel used	Cycle oil flash point above 150° F
Wheel dia.	1975 mm	Weight	2250 kgs.	Mid. length breadth	550 mm	Thickness parallel to axis	208 mm
Crk Shaft, dia. of journals	as per Rule 491 mm	Crank pin dia.	530 mm	Crk Webs	as fitted 288 mm	Thickness around eye hole	222.5 mm
as fitted	495 mm						
Wheel Shaft, diameter	as per Rule	Intermediate Shafts, diameter	as per Rule 420 mm	Thrust Shaft, diameter at collars	as per Rule 451 mm		
as fitted		as fitted	420 mm	as fitted	457 mm		
Screw Shaft, diameter	as per Rule	Screw Shaft, diameter	as per Rule 460	Is the { screw } shaft fitted with a continuous liner	{ screw }		
as fitted	✓	as fitted	460		yes		
Size Liners, thickness in way of bushes	as per Rule 21.6 mm	Thickness between bushes	as per rule 16.2 mm	Is the after end of the liner made watertight in the			
as fitted	25 mm	as fitted	209 94 mm				
Miller boss	yes	If the liner is in more than one length are the junctions made by fusion through the whole thickness of the liner	yes				
Is 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-corrosive	yes						
Are 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	6'-10"				

peller, dia. 16'-6" Pitch 14'-2" No. of blades 4. Material P. Bronze whether Moveable yes Total Developed Surface 89 sq. feet
 Method of reversing Engines Direct reversible governor or other arrangement fitted to prevent racing of the engine when declutched yes Means of lubrication
 Lubrication Thickness of cylinder liners .05 mm. Are the cylinders fitted with safety valves yes Are the exhaust pipes and silencers water cooled or lagged with
 conducting material If the exhaust is led overboard near the waterline, what means are arranged to prevent water from being syphoned back to the engine
 ling Water Pumps, No. 4 off. centrifugal pumps 250 tons each. Is the sea suction provided with an efficient strainer which can be cleared within the vessel yes.
 re Pumps worked from the Main Engines, No. none Diameter Stroke Can one be overhauled while the other is at work
 ups connected to the Main Bilge Line No. and Size 1-30 Ton, 1-140 Ton, 1-150 Ton, 1-250 Ton.
 How driven Motors.

Last Pumps, No. and size *One. 2 50 Gals. ✓* **Lubricating Oil Pumps, including Spare Pump, No. and size** *4 off. Rotary pumps. 200 lbs each.*

two independent means arranged for circulating water through the Oil Cooler *yes* **Suctions, connected to both Main Bilge Pumps and Auxiliary Bilge**

pumps, No. and size:—In Machinery Spaces *1-6", 2-4", 4-3 1/2", 1-3", 5-2 1/2", 5-2", 2-1 1/2".*

Holds, &c. *9-3 1/2", 5-3", 1-4", 1-2"*

Independent Power Pump Direct Suctions to the Engine Room Bilges, No. and size *8-6", 1-3". 1st 2nd*

all the Bilge Suction pipes in Holds and Tunnel Well fitted with strum-boxes *yes* **Are the Bilge Suctions in the Machinery Spaces**

from easily accessible mud-boxes, placed above the level of the working floor, with straight tail pipes to the bilges *yes*

all Sea Connections fitted direct on the skin of the ship *yes* **Are they fitted with Valves or Cocks** *Booth!*

they fixed sufficiently high 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** *above!*

they each 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.*

at pipes pass through the bunkers *✓* **How are they protected** *✓*

at pipes pass through the deep tanks *✓* **Have they been tested as per Rule** *✓*

[illegible]

Avenging Air Pumps, No.	Diameter	Stroke	Driven by
as per Rule, 192	192 mm.	Auxiliary Diesel oil engine 300	6 cpl. + S.C.S.A. 490 BHP each.
as fitted, 204	204 mm.	300	220 mm. Cpl. diam. 330 mm. Stroke 600 mm.

2 **RECEIVERS**:- Is each receiver, which can be isolated, fitted with a safety valve as per Rule Yes

the internal surfaces of the receivers be examined Yes. What means are provided for cleaning their inner surfaces ✓

there a drain arrangement fitted at the lowest part of each receiver Yes

High Pressure Air Receivers, No. 7 off. Cubic capacity of each 2 off. 550 litres Internal diameter 450 mm. thickness 20 mm.

3 off. 300 Internal diameter 9 3/4" thickness 3/8"

3 off. 80 Range of tensile strength 47.5-49.9 kg/cm² Working pressure by Rules 97.5 kg/cm²

Seamless, lap welded or riveted longitudinal joint Seamless Material S.M. Steel Range of tensile strength 31.5-33.9 kg/cm² Working pressure by Rules 83

Starting Air Receivers, No. 4 Total cubic capacity 2800 Cu. ft. Internal diameter 6'-3 9/16" thickness 1 1/32"

Seamless, lap welded or riveted longitudinal joint Riveted Material Steel Range of tensile strength 28-33 lbs. Working pressure by Rules 356 lbs.

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