

## STEEL STEAMER or MOTORSHIP.

Received at London Office 4 SEP 1930

State if Report has been sent on the Freeboard of the Vessel *Yes*State if Report is sent on the Machinery of the Vessel *Yes*

Date of completion of report

5 August 1930

Port of

Yokohama

No.

4566

Survey held at

Yokohama

Date First Survey

24th May 1929

Last Survey

16th August 1930

On the

(State if Machinery fitted Aft and if Single, Twin or Triple Screw)

TWIN SCREW MOTORSHIP "HIYE MARU"

State Type

(Full Scantling, Complete Superstructure with or without Tonnage Openings)

Intermediate between full scantling &amp; complete superstructure

State Type of Erections

Bridge &amp; forecastle

TONNAGE under Tonnage Deck...

7174.17

CLASS

100A1

State if with freeboard as condition of Class

Yes

Built at

Yokohama

Do. of space or spaces between Tonnage Dk. and Upper Dk.

2213.81

Length from fore part of stem to after part of stern post on summer L.W.L. See Sec. 3 (1a)

L 510.00

Breadth (greatest moulded)

B 66.00

Total

9387.98

Depth, at middle of length from top of keel to top of beam at side of uppermost continuous deck. See Sec. 3 (1c)

D 41.00

Tonnage

11621.71

1st Longitudinal Number (L x D) = 20910

2nd Numeral L x (B + D) = 54570

Framing Depth "d," at middle of length. See Sec. 3 (1d)

12.44

Proportions—Depth to Length—Uppermost continuous deck to top of keel

10.20

Draught Moulded

30.1.48

Launched 12th February 1930 Yard No. 178

Builders Yokohama Dock Co. Ltd.

Owners Kippon Yusen Kaisha

Managers

(Where necessary to be entered in Reg. Book.)

Residence

Port of Registry

Tokio.

If surveyed while building, afloat, or in dry dock

Building

## FRAMES, DOUBLE BOTTOM AND BEAMS.

	INCHES IN SHIP.	Any Departure from Approved Plans to be Noted.		INCHES IN SHIP.	Any Departure from Approved Plans to be Noted.
Spacing amidships	33		Bracket Floors, Frame		
" from 1/2 length to Collision bulkhead	27		" " Reversed Frame		
" in peaks	24		" " Vertical Struts		
FRAMING.			Centre Girder, depth and thickness amidships	51.64	
Amidships, Angle, $\angle$ or $\square$	10 3 1/2 40		" " top Angles	DOUBLE 3 1/2 3 1/2 60	
" Extends up to	Upper & 2nd dks alternately		" " bottom Angles	" 5 5 70	
Frame Amidships, Angle	5 3 34		Side Girders, No. each side and thickness	Three 46	
" Extends up to	3rd dk.		Margin Plate depth (excl. of flange) and thickness	43.60	
Frame Framing Girder	10		" " Vertical Angle to Tank side Bracket abaft 1/2 len. from stem	6 6 52 SINGLE	
in Uppermost Continuous 'tween Decks, Angle, $\angle$ or $\square$	9 3 1/2 38 10 3 1/2 40 alternately		" " Vertical Angle to Tank side Bracket forward 1/2 len. from stem	6 6 52 SINGLE	
Second 'tween Decks, Angle, $\angle$ or $\square$	10 3 1/2 40		" " Gussets, spacing and scantling abaft 1/2 len. from stem	Continuous 58-50 Every frame 46	
Third " " " "			" " Gussets, spacing and scantling forward 1/2 len. from stem		
in Peaks, Angle, $\angle$ or $\square$	10 3 1/2 40		Tank Side Brackets, height above base line at toe of Frame and thickness	80 1/2 52	
and Spacing of Rivets through Frame and Shell Plating amidships	7/8 5 1/4		INNER BOTTOM PLATING.		
Frame Joggled	Yes		Breadth and thickness of Middle Line Strake	58.58	
ARRANGEMENTS (Sec. 7), state system and particulars	Ref. frames & scantling stronger as per approved plans		Thickness of remainder in Holds	50	
FLATTENING OF BOTTOM FOR- ward. State Particulars	Bottom plating maintains midship thickness to collision bulkhead. Bottom frames 6x6x50A from 3/5 L to collision bulkhead. (see plan)		Are Rule requirements complied with regarding increases of scantlings in way of double bottom in E. & B. space and framing in Bunkers and Boiler Room?	Yes 50	
BOTTOM.			BEAMS.		
Depth and thickness at mid-line in Holds			Uppermost Continuous Deck, amidships in Wells, Angle, $\angle$ or $\square$	8x3 1/2 x 3 1/2 54	
Height of Brackets at side above base line at toe of frame			" " in way of Bridge, Angle, $\angle$ or $\square$	8x3 1/2 x 3 1/2 54 42	
Line Keelson, on Floors, Angles, $\angle$ or $\square$			Spacing	33	
" " Through Plate or Intercostal Plate			Second Deck, amidships, Angle, $\angle$ or $\square$	8x3 1/2 x 3 1/2 42	
" " Foundation Plate on Floors			Spacing	33	
" " Flat Plate Keel Angles			Third Deck, amidships, Angle, $\angle$ or $\square$	9x3 1/2 x 3 1/2 34	
Angles, No. each side			Spacing	33	
Thickness of Intercostal Plate			117 to 133		
Angles			Fourth Deck, amidships, Angle, $\angle$ or $\square$	10x3 1/2 x 3 1/2 44	
DOUBLE BOTTOM.			Spacing	33	
Solid Floors, thickness and spacing	every frame 46		AFT BOAT		
" " Are Frame and Reversed Frame joggled?	Yes		Peap Deck, Angle, $\angle$ or $\square$	6 3 32	
Bracket Floors, breadth and thickness at middle line			Spacing	33	
" " breadth and thickness at margin plate			Bridge Deck, Angle, $\angle$ or $\square$	8x3 1/2 x 3 1/2 40	
			Spacing	33	
			Forecastle Deck, Angle, $\angle$ or $\square$	8x3 1/2 x 3 1/2 40	
			Spacing	27 1/2 24	

# PILLARS AND DECKS.

	INCHES IN SHIP.			Any Departure from Approved Plans to be Noted.		INCHES IN SHIP.			Any Departure from Approved Plans to be Noted.
<b>PILLARS, No. of Rows.....</b>					Stringer Plate, breadth and thickness in way of Bridge .....	52	42		
„ in 'tween Decks, Size and Spacing.....					Thickness of Plating abreast Deck openings in way of Wells .....		44		
„ „ „ „ „					Thickness of Plating abreast Deck openings in way of Bridge .....		38		(Replan)
„ in Holds „ „					Thickness of Plating within line of openings...	36	32		
„ „ „ „ „					If Sheathed, material and thickness .....	3	O.P.		
<b>Centre Line Bulkhead.</b>					<b>Third Deck.</b>				
Stiffeners and Spacing.....					Stringer Plate, breadth and thickness.....	52	42	34	
Plating, thickness of .....					If Plated, state thickness.....		36	32	
<b>STRINGERS AND DECKS.</b>					<b>Fourth Deck. 117-133</b>				
<b>Uppermost Continuous Deck. BRIDGE ENDS</b>					Stringer Plate, breadth and thickness.....	52	34		
Stringer Plate, breadth and thickness in Wells DOUBLING	71	84			If Plated, state thickness .....		30		
„ „ „ „ in way of Bridge	52	56	48	(Replan)	<b>AFT BOAT</b>				
„ Angle in Wells BRIDGE ENDS	7	7	86		<b>Poep Deck.</b>				
Thickness of Plating abreast Deck openings in way of Wells .....			70		Stringer Plate, breadth and thickness .....	36	40		
Thickness of Plating abreast Deck openings in way of Bridge .....			48	(Replan)	Plating, Sheathing, material and thickness ...	3	O.P.		
Thickness of Plating within line of openings...			36	WB	<b>Bridge Deck.</b>				
If Sheathed, material and thickness .....			3 1/2	O.P.	Stringer Plate, breadth and thickness.....	71	50		
<b>Second Deck. BRIDGE ENDS</b>					Plating, Sheathing, material and thickness ...	46	2 1/2	TEAK	
Stringer Plate, breadth and thickness in Wells...	52	48			<b>Forecastle Deck.</b>				
					Stringer Plate, breadth and thickness .....	37	40		
					Plating, Sheathing, material and thickness ...	38	3	O.P. & 4 TEAK UNDER WINDLASS	

## SHELL PLATING.

SCANTLINGS.					RIVETING.								
STRAKES.	AS IN VESSEL.				ANY DEPARTURE FROM APPROVED PLANS TO BE NOTED.	EDGES.		BUTTS.					
	AMIDSHIPS.		FORWARD.	AFT.		State if jogged?	SINGLE OR DOUBLE.	RIVETS.		No. OF ROWS OF RIVETS.	RIVETS.		STRAPPED OR LAPPED.
	Breadth.	Thickness.	Thickness.	Thickness.				Diam.	Spacing cr. to cr.		Diam.	Spacing cr. to cr.	
	Inches.	Inches.	Inches.	Inches.			Inches.	Inches.		Inches.	Inches.		
FLAT PLATE KEEL .....	57	98	86	86		DOUBLE	1 1/8	4 1/2	3 R	1 1/8	4 1/2	DOUBLE STRAPS	
„ DBLG. (if any)													
BOTTOM PLATING, No. of Strakes ..... 4 .....	77 3/4	72	72-74	58-72		"	7/8	3 1/2	4 R - 3 R	7/8	3 1/2	LAPPED	
BILGE PLATING, No. of Strakes ..... 2 .....	77	72	56	58-68		"	7/8	3 1/2	4 R - 3 R	7/8	3 1/2	"	
SIDE PLATING, No. of Strakes ..... 4 .....	78 3/8	72	52	60-52		"	7/8	3 1/2	4 R - 3 R	7/8	3 1/2	"	
UPPER DECK, Sheer-strake in Wells	60	1.02	52	52		"	1 1/8	4 1/2	5 R - 3 R	1 1/8	4 1/2	"	
BRIDGE ENDS DOUBLING	60	88				"	7/8	3 1/2	4 R	7/8	3 1/2	"	
UPPER DECK, Sheer-strake in Bridge ...	60	72				"							
STRAKE BELOW Sheer-strake in Wells	76 3/8	88	52	52		"	1	4	5 R - 3 R	1	4 1/2	"	
BRIDGE ENDS	76 3/8	72				"	7/8	3 1/2	4 R	7/8	3 1/2	"	
STRAKE BELOW Sheer-strake in Bridge ...													
POOP SIDE PLATING .....													
BRIDGE SIDE PLATING ...	68	76-74				DOUBLE	1	4	4 R	1	4	"	
FORECASTLE SIDE PLATING	56		46			SINGLE	3/4	3	2 R	3/4	2 3/8	"	

## WATERTIGHT BULKHEADS.

Total No. of W.T. BULKHEADS in Vessel—						
Extending to Upper Deck (Sec. 3 c)		9				
" Deck next below						
As per Rule						
		Plating Thickness.	STIFFENERS.			
			VERTICAL.		HORIZONTAL.	
			Scantlings.	Spacing.	Scantlings.	Spacing.
No 104			L			
MIDSHIP BULKHEAD		Upper tween decks	30-28	5.3 x 40	24 x 33	✓
"		Second "	34-32	5 1/2 x 30	32	✓
"		Third "				
"		Holds .....	50-36	12 x 3 1/2	56 33	✓
COLLISION		(in Hold) .....	56-34	11 x 3 1/2	48 24	✓
AFTER PEAK		.....	54-38	12 x 3 1/2	54 24	✓

## FORGINGS and CASTINGS.

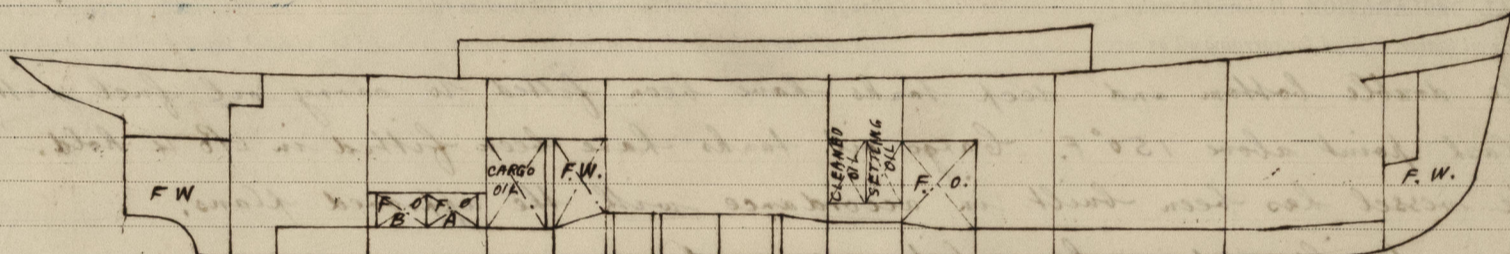
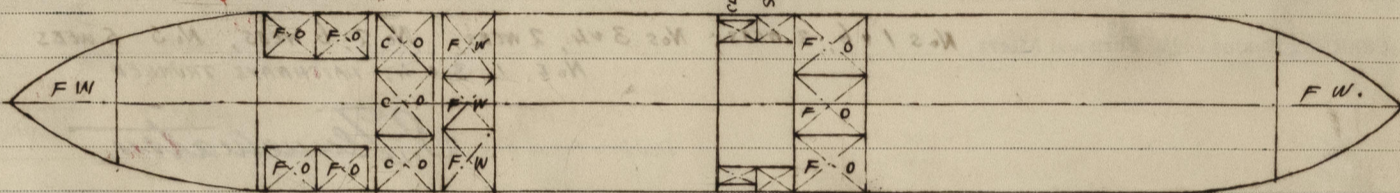
	Casting or Forging.	Scantlings.	Maker's Name.	Any departure from approved plans to be noted.
<b>KEEL, Bar</b> .....	✓		KOBE STEEL WORKS	
<b>STEM</b> .....	CASTING			
<b>STERN FRAME</b> { Propeller Post .....	CASTING		AS APPROVED PLAN KOBE STEEL WORKS	
{ Rudder Post .....			1 1/4 - DITTO -	
<b>RUDDER—A x D.....</b>			AS APPROVED PLAN	
<b>Speed of Vessel.....</b>		17 KNOTS		
<b>RUDDER</b> mainpiece at head ...	FORGING	14 1/2	KOBE STEEL WORKS	
„ „ heel ...		12		
„ how constructed .....	SEMI BALANCED	ARMS SHRUNK TO MAIN PIECE		
„ double or single plate	SINGLE	1-18		
„ coupling, vertical or horizontal .....		VERTICAL		

<b>STEEL.</b>	Manufacturer's Name or Trade Mark of the Steel used in the construction of the Vessel (state process of manufacture) Charano S.B. Co. Riffon Kohan Karaka, Penco & Partners, Dorman Long, Vereinigte Stahlwerke, et. S. Consett Iron Co. Appleby Iron Co. Bolckow Vaughan & Co. Lancashire Steel Co. Frodingham Iron & Steel Co. Cargo Fleet, David Colville & Co. Has the Steel been tested as required by the Rules? Yes.
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GENERAL REMARKS—(The Surveyor should state the Number of Report and Name of any Sister Vessel. Plans showing Vessel as built should be forwarded and a List of the Plans should be embodied.)

WATER BALLAST			FUEL OIL			FRESH & FEED WATER		
	LENGTH	35 CF. TONS		LENGTH	39 CF. TONS		LENGTH	36 CF. TONS
No 1, D.B.	58.5	112.91	No 3 D.B.	38.5	200.56	No 7 D.B. CENTRE	35.45	31.83
2	65.75	234.77	4 "	19.25	114.00	" 9 " "	16.50	131.06
10	27.5	128.34	5 "	22.00	188.30	DEEP F.W. TANK	16.50	506.26
12	46.75	66.31	6 "	11.00	103.38	FORE PEAK TANK	30.50	110.22
			7 " A	30.25	152.52	AFT PEAK TANK	32.00	166.28
			" " B	27.50	132.66			
			" " OIL DRAIN SIDE	57.75	127.84			35 CF TONS
			" " OIL DRAIN CENTRE	19.25	18.59	CARGO OIL TANK INCL. EXP. TRUNKS	22.0	800.28
			8 "	8.25	90.16			
			11	52.25	144.98			
			FORE FUEL OIL TANK	19.25	639.66			
			CLEANED OIL TANK	11.00	64.16			
			SETTLING TANK	11.00	85.08			
			AFT FUEL OIL TANK A	24.75	186.36			
			" " " " B	24.75	107.24			



No 12 No 11 No 10 No 9 No 8 No 7 No 6 No 5 No 4 No 3 No 2 No 1  
W.B. F.O. W.B. F.W. F.O. F.O. F.O. F.O. F.O. F.O. F.O. W.B. W.B.



Particulars of Drop Test of Cast Steel Anchors, viz.:—  
Weight, Surveyor's Initials, Number of Certificate, Date of Test.

1st Bower	61.1.0	AW	973	23/2/29
2nd "	61.2.25	AW	990	4/6/29
3rd "	60.3.10	AW	991	27/5/29
STREAM	27.1.26	AW	984	2/4/29.

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop ft., R.Q.D. ft., Bridge 228.25 ft., Forecastle 73.75 ft. (in feet and tenths). When the Poop is joined to the B.D., this should be distinctly stated.

No. and Material of Decks (this information is to be given as it should appear in the Register Book) 3 decks (Stk. weather deck ft. W.S.) and 4th deck in No 3 hold

Official No. 36219 ; Signal Letters V.G.R.L. Is bottom of Vessel coated with cement if not give particulars of composition On ballast and F.W. TANKS only

PARTICULARS OF WATER BALLAST.— see above

Where Fitted.	*Length. Feet.	Water Capacity. Tons.	Where Fitted.	*Length. Feet.	Water Capacity. Tons.
Double bottom, aft,			Fore peak tank,		
Double bottom, under Engines and Boilers,			After peak tank,		
Double bottom, if under Engines only,			Deep tank, aft,		
Double bottom, if under Boilers only,			Deep tank, forward,		
Double bottom, forward,			Other tanks, if fitted,		
Total capacity of double bottom			(If necessary, furnish further information by sketch.)		

\* The wells are not to be included in the lengths of the tanks.

Order for Special Survey No. 14

Date

Dates of Surveys held while building

24/5, 28/5, 29/5, 30/5, 31/5, 5/6, 7/6, 12/6, 17/6, 24/6, 25/6, 28/6, 2/7, 4/7, 8/7, 10/7, 12/7, 19/7, 25/7, 30/7, 2/8, 6/8, 8/8, 12/8, 14/8, 17/8, 19/8, 20/8, 22/8, 26/8, 30/8, 2/9, 13/9, 16/9, 25/9, 8/10, 12/10, 15/10, 18/10, 22/10, 25/10, 28/10, 31/10, 1/11, 5/11, 7/11, 12/11, 18/11, 22/11, 26/11, 28/11, 29/11, 3/12, 4/12, 6/12, 9/12, 10/12, 12/12, 14/12, 16/12, 17/12, 20/12, 21/12, 29, 9/1, 14/1, 16/1, 17/1, 21/1, 22/1, 27/1, 29/1, 1/2, 10/2, 25/2, 4/3, 5/4, 10/4, 14/4, 21/4, 23/4, 10/5, 20/5, 21/5, 5/6, 12/6, 17/6, 18/6, 19/6, 20/6, 21/6, 24/6, 30/6, 2/7, 29/7, 31/7, 7/8, 16/8, 30. Total No. of Visits 97