

State if Report is sent on the Machinery of the Vessel.....**Yes**

No. 2336

State Type (Full Scantling, Complete Superstructure with or without Tonnage Openings) Complete Superstructure with Tonnage Opening State Type of Erections Raised Fore-

Register Tonnage **3,673.17** 1st Longitudinal Number (L x D).....= **1722** ✓ Managers **/**

31.496

**1st Longitudinal Number (L × D).....= 1732 ✓** *Managers* /

Do. Long Bridge to top of keel } - If surveyed while building, afloat, or in dry dock

**Draught Moulded** ..... **8.393** While Building.

	m/m or INCHES IN SHIP.	Any Departure from Approved Plans to be Noted.		m/m or INCHES IN SHIP.	Any Departure from Approved Plans to be Noted.
<b>AMES, Spacing amidships</b> .....	800	As Approved	<b>Bracket Floors, Frame</b> .....	B.A. 8" 3 1/2" .45	Approved 7x3 1/2 x .425
" " from 3/8 length to Collision bulkhead.....}	650	"	" " Reversed Frame .....	B.A. 180 75 9.5	As Approved
" " in peaks.....	600	"	" " Vertical Struts .....	B.A. 180 75 9.5 Ch. 230x90x90x9.5/13.5	
<b>DE FRAMING.</b>			<b>Centre Girder, depth and thickness amidships</b>	1185x14.5	As approved
<b>Frame Amidships, <del>1800</del> [ 000 ]</b> .....	300x90x90x10 13	✓ "	" " top Angles .....	Angle 90x90x13	✓ "
" " Extends up to <b>Up. Dk.:- Every 4th Fr.</b> "		✓ "	" " bottom Angles .....	" 130 130 15	✓ "
" " <b>2nd Dk.:- Alt. Frs.</b> ✓ "		✓ "	<b>Side Girders, No. each side and thickness</b> One	10.5 ER 11.5	✓ "
<del>3rd Dk.:- Every Fr.</del> ✓ "		✓ "	<b>Margin Plate</b> depth (excl. of flange) and thickness .....	1020x14.5	✓ "
" " <del>1800x90x90</del> /			" " Vertical Angle to Tank side Bracket abaft 1/4 len. from stem .....	130 130 13	✓ "
<b>Depth of Framing Girder</b> .....	Every 4th 300x90x90x10 13	✓ "	" " Vertical Angle to Tank side Bracket forward 1/4 len. from stem .....	150x150x13 with 90x90x13 and 250x250x13.5 Tee.	
<b>Frames in Uppermost Continuous 'tween</b> <b>Decks, Angle, [ 00 ]</b> .....	Other Main frs. cut to 200x90x10	✓ "	" " Gussets, spacing and scantling abaft 1/4 len. from stem.....	Continuous 12.5-11.5	✓ "
" " <b>Second 'tween Decks, Angle, [ 00 ]</b> ✓ "	Every 2nd fr. cut to 200x90x10	✓ "	" " Gussets, spacing and scantling forward 1/4 len. from stem.....	1895 in ER	✓ "
" " <b>Total</b> " " " "			<b>Tank Side Brackets, height above base line</b> at toe of Frame and thickness	1895 in Hold	✓ "
<b>Framing in Peaks, Angle or [</b> .....	9" 3 1/2" .475	✓ "	<b>INNER BOTTOM PLATING.</b>		
<b>Diameter and Spacing of Rivets through</b> <b>Frame and Shell Plating amid-</b> <b>ships</b> .....	22 Dxl45	✓ "	Breadth and thickness of Middle Line Strake ..	1435x14.5-12	✓ "
<b>State if Frame Joggled</b> .....	Joggled	✓ "	Thickness of remainder in Holds .....	12.5-11 ER 14.5	✓ "
<b>STRENGTHENING ARRANGEMENTS (Sec. 7), state</b> <b>system and particulars</b> .....	Deep fr. system with channel side stringers & beams. Every fr. in F.P. tank. As Approved. ✓	✓	Are Rule requirements complied with regarding increases of scantlings in way of double bottom in E. <del>CL</del> space and <del>anchoring in</del> <del>Bottom and Bottom</del> ? .....	Yes	✓ "
<b>STRENGTHENING OF BOTTOM FOR-</b> <b>WARD. State Particulars</b> .....	Solid floors, with Double angle frs: Add side girders & 3 strakes shell plating increased in thickness. ✓ As approved. ✓	✓	<b>BEAMS.</b>		
<b>ANGLE BOTTOM.</b>			<b>Uppermost Continuous Deck, amidships</b>	200x90x90x8/13.5	"
<b>Floors, Depth and thickness at mid-line in</b> <b>Holds</b> .....			" " in Wells, <del>1800</del> [ 00 ]	--	
Height of Brackets at side above base line at toe of frame .....			" " in way of Bridge, Angle, [ or [ .....	Every frs.	✓ "
<b>Middle Line Keelson, on Floors, Angles,</b> <b>[ or [</b> .....			Spacing .....	230x90x90x9.5 13.5	✓ "
" " " Through Plate or Intercostal Plate...			<b>Second Deck, amidships, <del>1800</del> [ 00 ]</b> .....	230x90x90x9.5 13.5	✓ "
" " " Foundation Plate on Floors .....			Spacing .....	Every frs.	✓ "
" " " Flat Plate Keel Angles			<b>Third Deck, amidships, <del>1800</del> [ 00 ]</b> .....	230x90x90x9.5 13.5	✓ "
<b>Side Keelsons, No. each side</b> .....			Spacing .....	Every frs	✓ "
" " thickness of Intercostal Plate...			<b>Fourth Deck, amidships, <del>1800</del> [ 00 ]</b> .....		
" " Angles .....	12		Spacing .....		
<b>DOUBLE BOTTOM.</b>			<b>Poop Deck, Angle, [ or [</b> .....		
<b>Solid Floors, thickness and spacing</b> .....	11.5 & 11 in E.R. every 3rd frs: except at ends under D.T. and in E.R. As approved. ✓	✓	Spacing .....		
" " Are Frame and <del>1800</del> <del>1800</del> <del>1800</del> joggled? .....	Yes	✓ "	<b>Bridge Deck, <del>1800</del> [ 00 ]</b> .....	150 75 8	As approved
<b>Bracket Floors, breadth and thickness at</b> <b>middle line</b> .....	890x11.5	✓ "	Spacing .....	Every frs	✓ "
" " breadth and thickness at margin plate.....	890x11.5	✓ "	<b>Forecastle Deck, <del>1800</del> [ 00 ]</b> .....	180x75x75x8 10.5	✓ "
			Spacing .....	Every frs	✓ "



## 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> 2 Rows Widely Spaced ✓	As approved ✓		Stringer Plate, breadth and thickness in way of Bridge .....	--	
in 'tween Decks, Size and Spacing ....	-Do-	✓ "	Thickness of Plating abreast Deck openings in way of Wells .....	10.5 - 8	As approved ✓
" " " " "			Thickness of Plating abreast Deck openings in way of Bridge .....	--	
in Holds " "	-Do-	✓ "	Thickness of Plating within line of openings...	9 - 8	"
" " " " "			If Sheathed, material and thickness .....	--	
<b>Centre Line Bulkhead.</b>			<b>Third Deck.</b>		
Stiffeners and Spacing.....	None	"	Stringer Plate, breadth and thickness.....	1300x8.5	✓ "
Plating, thickness of .....	--		If Plated, state thickness.....	Plated 7.5	"
<b>STRINGERS AND DECKS.</b>			<b>Fourth Deck.</b>		
<b>Uppermost Continuous Deck.</b>			Stringer Plate, breadth and thickness.....		
Stringer Plate, breadth and thickness in Wells.....	1800x19-11	✓ "	If Plated, state thickness .....		
" " " " in way of Bridge .....	--		<b>Poop Deck.</b>		
" Angle in <del>Wells</del> Amidships.....	150x150x19	✓ "	Stringer Plate, breadth and thickness .....		
Thickness of Plating abreast Deck openings in way of Wells .....	16 - 9	✓ "	Plating, Sheathing, material and thickness ...		
Thickness of Plating abreast Deck openings in way of Bridge .....	--		<b>Bridge Deck.</b>		
Thickness of Plating within line of openings...	10.5-9	✓ "	Stringer Plate, breadth and thickness.....	1400x8	✓
If Sheathed, material and thickness <b>Wood</b> ...	75 Midship only. ✓		Plating, Sheathing, material and thickness ..	75 O.P. Wood on 6.5 Steel plate. ✓	
<b>Second Deck.</b>			<b>Forecastle Deck.</b>		
Stringer Plate, breadth and thickness in Wells...	1300x11.5-9	✓ "	Stringer Plate, breadth and thickness.....	915x10	✓ As approved
			Plating, Sheathing, material and thickness ..	Steel- 10	✓ "

## SHELL PLATING.

SCANTLINGS.					RIVETING.								
STRAKES.	AS IN VESSEL.				ANY DEPARTURE FROM APPROVED PLANS TO BE NOTED.	EDGES.			BUTTS.				
	AMIDSHIPS.		FORWARD.	AFT.		State if jogged?	Joggled	RIVETS.	No. OF ROWS OF RIVETS.	RIVETS.		STRAPPED OR LAPPED	
	Breadth.	Thickness.	Thickness.	Thickness.						SINGLE OR DOUBLE.	Diam.		Spacing cr. to cr.
	m/m	m/m	m/m	m/m			m/m	m/m		m/m	m/m		
FLAT PLATE KEEL .....	1400	22.5	20.5	20.5	As Approved	Double	25	100	✓ 4	25	100	✓ Lapped	
„ DBLG. (if any)		/											
BOTTOM PLATING, No. of Strakes .....4.....		18	20	15	"	Double	22	88-90	✓ 4	22	90	✓ Lapped	
BILGE PLATING, No. of Strakes .....One.....		18	20	15	"	"	22	"	✓ 4	"	"	✓ "	
SIDE PLATING, No. of Strakes .....4.....		17.5	15.5	12.5	"	"	"	"	✓ 3	"	80	✓ "	
UPPER DECK, Sheer-strake in <del>Wells</del> .....	1900	21.5	12.5	12.5	"	"	25	100	✓ 4	22	90	✓ "	
UPPER DECK, Sheer-strake in Bridge ...		/											
STRAKE BELOW Sheer-strake in <del>Wells</del> .....	1900	17.5	12.5	12.5	"	"	22	88-90	✓ 4	22	90	✓ "	
STRAKE BELOW Sheer-strake in Bridge ...		/				/							
POOP SIDE PLATING .....		/				/							
BRIDGE SIDE PLATING ...		/				/							
FOREC'TLE SIDE PLATING			11		"	Single	19	75	✓ One	19	65	✓ Lapped	

## WATERTIGHT BULKHEADS.

Total No. of W.T. BULKHEADS in Vessel—

Extending to Upper Deck (Sec. 3 c) **7** 88H.Deck next below **8**As per Rule **7**

## STIFFENERS.

	Plating Thickness.	VERTICAL.				HORIZONTAL.			
		Scantlings.	Spacing.	Scantlings.	Spacing.	Scantlings.	Spacing.	Scantlings.	Spacing.
MIDSHIP BULKHEAD, Upper 'tween decks	7- ✓	150x75x8	745	✓		6.5- ✓	180x75x7	600	✓
" " Second "	8- ✓	180x75x7	745	✓		7.5- ✓	9.5 B.A.	685	✓
" " Third "	11- ✓	300x90x90		✓		8.5- ✓	10x13 ch	"	✓
" " Holds .....	11.5- ✓	180x75x7	625	✓		8.5- ✓	10x13 ch	"	✓
<b>COLLISION</b> " (in Hold) .....	9.5- ✓	180x75x7	600	✓		7.5- ✓	9.5 B.A.	600	✓
<b>AFTER PEAK</b> " " .....	7.5- ✓	9.5 B.A.	600	✓					

## FORGINGS and CASTINGS.

	Casting or Forging.	Scantlings.	Maker's Name.	Any departure from approved plans to be noted.
<b>KEEL, Bar</b> .....	Flat Plate	MBJK	As approved ✓	
<b>STEM</b> .....	F.S.	268x70	"	"
<b>STERN FRAME</b> {	Propeller Post	C.S. Stream	✓	"
	Rudder	Lined	✓	"
<b>Speed of Vessel</b> .....	16 knots		✓	
<b>RUDDER—Type</b> .....	Semi-balance		✓	
" A x D .....	1445		"	
" Diam. of head .....	F.S.	305 MBJK	✓	"
" Mainpiece at top pintle	C.S. Box	"	✓	"
" " heel ...	Section	"	✓	"
" how constructed .....	Built up		✓	
" double or single plate	Double 12.5	"	✓	"
" coupling, vertical or horizontal .....	Vertical		✓	"

Manufacturer's Name or Trade Mark of the Steel used in the construction of the Vessel (state process of manufacture) **Open Harth Process.** ✓**STEEL.** **Nippon Seitetsu K.K. Yawata Seitetsu-sho; Kawasaki Dkyd; Mitsubishi Nagasaki Seiko-sho; Nippon Koken K.K.**Has the Steel been tested as required by the Rules? **Yes** ✓



EQUIPMENT No 4495 ✓												LETTER dt. ✓	ANCHORS.		
Number of Certificate.	Anchor.	WEIGHT, EX. STOCK.			WEIGHT OF STOCK.			TEST, PER CERTIFICATE.				WEIGHT REQUIRED BY TABLE 53.	Description of Anchor.	Makers.	Where and when tested and Superintendent.
		Cwts.	qrs.	lbs.	Cwts.	qrs.	lbs.	Tons.	cwts.	qrs.	lbs.	Cwts.			
1392	1st Bower ...	82	1	14 ✓	Stockless			60	0	0	0	✓	Hall Latest Imp. Pat. CS Head Stl Wks	Kobe	Kobe 31-7-37 S.S.
1390	2nd „ ...	81	2	19 ✓	"			59	10	0	0	✓	"	"	" " "
1391	3rd „ ...	81	1	7 ✓	"			59	10	0	0	✓	"	"	" " "
	Collective weight.	245	1	12 ✓								232 ✓			
1360	Stream .....	25	2	19	6	3	9	25	8	0	14	23.5	Ordinary type	"	" 6-7-37 F.I.

CHAIN CABLES.										HAWSERS AND WARPS.				
Number of Certificate.	Length and size supplied.	Test per Certificate.	WEIGHT OF CHAIN CABLE.		Length and size per Table 53.	Description.	Makers of Cables.	Where and when tested, and Superintendent.	Material.	Length and size supplied.	Breaking Test of Steel Wire.	Length and size per Table 53.		
	Length. Diam.	Statutory. Break-ing.	Supplied.	Per Rule.	Length. Diam.					Length. Cir.	Tons.	Length. Cir.		
2421	152 1/2	5	120 1/2	577-2-10	940	300 2 1/2	Osaka Chain Mach. Wks	Osaka 30-8-37 T.M.	SW. 1942	240	44	94.0	240	140
2382	151 1/6	„	„	565-0-4	„	„	„	20-8-37 T.M.	HAWSERS & WARPS	185	24	(3 off)	„	„
	„	„	„	„	„	„	„	„	„	185	22	(2 off)	„	„
1942	M Dia.	„	„	„	„	„	Tokyo Seiko KK	Kokura 22-11-37 TK	„	185	65	(4 off)	„	Manila Rope.
Iron Stream Chain or Steel Wire	225	38	66	72.3	-	220	GST	„	„	„	„	„	„	„

Steering Gear, ~~Steam~~ Electric Leonard Type. Dispensed with: App. by Kobe letter 29-12-36. Additional Motor fitted ✓

Boats 2- 9150x2750x115 and One- Temma. Steering Chains, Size and Test / Windlass Electric.

Ceiling in Holds, thickness and material 65 m/m Wood on 50 m/m Battens. Cargo Battens, thickness, material and spacing 150x50 Spaced, 180 m/m Apart. ✓

Cargo Hatchways. (Upper Deck) Steel Coamings, 760x12.5, Ends 11 m/m. Thickness of Hatches 75 m/m Wood.

Size of No. 1 Hatchway (Forward) 5.85x5.0M No. 2 11.2x6.4 M No. 3 8.8x6.4 M No. 4 7.2x6.7 M No. 5 11.2x6.4 M No. 6 7.05x6.0 M No. 7- 1.80x1.20 M

Number of Shifting Beams ~~as per plan~~ No. 1- 3: No. 2 & 5- 6: No. 3- 5: No. 4 & 6- 4:

Builder's Signature

GENERAL MANAGER

GENERAL DECLARATION. It should be stated (a) whether the vessel (if not a motorship) is fitted for the carriage and burning of oil used as fuel /  
(b) whether the vessel, not being an oil tanker, is fitted for carrying oil as cargo Yes, in D.T. The positions in which oil is carried as fuel or cargo should be indicated, together with the flash point.

Fuel oil carried in Double bottom tanks, wing tanks at aft end of engine room and aft end of Tunnel. F.P. above 150° F. All requirements of Sections 20 and 34 of the Rules complied with.

This vessel has been constructed under Special Survey in accordance with the Rules & Approved plans. The materials have been tested found efficient and the workmanship throughout is good. ✓

All double bottom tanks, peak tanks, deep tanks (cargo oil & fuel oil) and fresh water tanks tested as required by Rules and found and tight. ✓

Cargo oil tanks specially tested after completion of vessel, See separate certificate, Copy herewith. ✓

Weather decks, Hold & tween deck, bulkheads, deck houses, W.T. doors, Taraulins and side scuttles hose tested and found good. ✓

All oil fuel suction & filling pipes tested in place to 60 lbs per sq. inch: Tank heating coils tested in place to 240 lbs per sq. inch: and all bilge & ballast pipes tested in place to 30 lbs per sq. inch: and all found good and sound. W.T. doors in Eng. Rm & hand pumps in peaks tried & found good. ✓

The amount of Entry Fee ..... £ 10-0-0 : Fees applied for, 16. 3. 1938  
Special Survey Fee.... £ 457-13-11 Received by me, 23. 5. 1938  
Travelling Expenses, if any £ 48:50 (Lon) £ 34:20 (Kob) 23. 5. 1938  
State whether the Vessel has been built under Special Survey Under Special Survey. Signature N. Buchanan / T. Ross  
Certificate to be sent to SHIMONOSEKI Date of issue 27/5/38  
Surveyor to Lloyd's Register of Shipping.

Committee's Minute

Character assigned

TUE. 26 APR 1938

+ 1000 ft  
With freeboard  
Carrying Cargo oil H. atax 150° F in Deep Tanks

Lloyd's and  
+ dimb 3.38  
S.B. 100 ft  
oil 1/2

Lloyd's Register Foundation



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.)

The freeboard has been assigned by the Japanese Government. Freeboard calculation sheet (C11 Comp) together with verification form forwarded herewith.

Note:- The scantlings have been arranged so that if, at any time in the future, the tonnage openings are closed the vessel will be entitled to the Maximum draught which could be assigned to a complete superstructure vessel.

Plans of vessel as built forwarded under separate cover:-

Midship Section: Construction Profile & Deck: (Sheet 1 & 2): W.S. Pillar & Girder: O.T. & W.T. Bulkhead: Stem: Stern Frame: Rudder: Shell Expansion: Aux. Engine Seat: Pumping Plan: and Steel Invoices:

Forging & casting certificates forwarded herewith:-

Stem (Cert No. 1786): Stern Frame (Cert No. 1770) Rudder (Cert No. 1830) & 1910

SPECIAL NOTATIONS:—Either as part of the vessel's class or for record in the Register Book \*100AI with freeboard. Complete superstructure with Tonnage opening. Lloyd's A & C.P. Fitted for oil fuel F.P. above 150° F Carrying cargo oil F.P. above 150° F in deep tanks. Grutter Stern. Oil engine. D.F. E.D.S. G.Y.C. Ref. Machy: 3 Dks (3rd dk omitted in aft hold).

Particulars of Drop Test of Cast Steel Anchors, viz.:—	1st Bower	46 - 1 - 27	S.S.	1392	1-5-37
Weight, Surveyor's Initials, Number of Certificate, Date of Test.	2nd "	46 - 0 - 27	"	1390	"
	3rd "	45 - 2 - 27	"	1391	12-5-37

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop — ft., R.Q.D. — ft., Bridge — ft., Forecastle 39.0 ft. (in feet and tenths). When the Poop or Forecastle are joined to the B.D., this should be distinctly stated Not jointed Over-all Length 485.42 feet.

No. and Material of Decks 3 dks steel, 3 Tier beams. 12K steel, 8K 3rd dk except in after hold. Is bottom of vessel coated with cement Yes- Water tanks and Wells, only. if not give

#### PARTICULARS OF WATER BALLAST.—

Where Fitted.	Length. Feet.	Water Capacity. Tons.	Where Fitted.	Length. Feet.	Water Capacity. Tons.
Double bottom, aft,	110.24	403.64	Fore peak tank,	25.59	55.0
Double bottom, under Engines and Boilers,	76.12	698.76	After peak tank, (Upp & Lower tks)	17.72	148.1
Double bottom, if under Engines only,	—	—	Deep tank, aft,	41.99	1360.1
Double bottom, if under Boilers only,	171.10	515.12	Deep tank, forward,	26.25	122.1
Double bottom, forward,	1617.52	1617.52	Other tanks, if fitted,	10.50	157.1
Total capacity of double bottom			(If necessary, furnish further information by sketch. Wing F.O. Tk. side Tk)		

\* The wells are not to be included in the lengths of the tanks (See Circular No. 1284).

Order for Special Survey No. 129

Date 2-10-1936 (Lon)

Dates of Surveys held while building

1937 May 3.5.6.10.12.13.21.24.27 June 1.2.4.11.15.17.19.22 July 1.8.19.23 Aug 3.12.14.26.28 Sep 4.9.10.15.17.27.28.30 Oct 1.4.5.6.9.11.12.13.15.19.20.21.22.23 Nov 4.11.22 Dec 4.6.8.28. 1938, Jan 8.12.14.20.24.25.28 Feb 1.2.3.7.8.12.14.16.17.22 Mar 2.3.5.8. 11.12.14.15.

Total No. of Visits 83