

RECEIVED

Rpt 1 JUN 1949

## STEEL STEAMER OR MOTORSHIP.

Received at London Office

Date of completion of report

8<sup>th</sup> June 1949

Port of

Malmö

No. 2698

Survey held at

Malmö

Date First Survey

19<sup>th</sup> April

Last Survey

23<sup>rd</sup> May 1949

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

Tmg "HARALD"

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

State Type of Erections

None

TONNAGE under Tonnage Deck ...

176

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

Total

188

Gross Tonnage

48

Register Tonnage

## REGISTERED DIMENSIONS.

FEET

Length

104.8

Breadth

22.3

Depth

12.0

CLASS 10091 Following

State if with freeboard as condition of Class

No

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

L 100.7

Breadth (greatest moulded)

B 22.1

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

D 12.76

1st Longitudinal Number (L x D)

1285

2nd Numeral L x (B + D)

3510

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

11.5

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

8

Do. Long Bridge to top of keel

✓

Draught Moulded

10.9

Built at

Motala 1916

Launched

Yard No. 464

Builders

Motala Varvsbaser AB

Owners

Göteborgs Baggvarvs &amp; Baggvarvs AB

Managers

E. Rothman

(Where necessary to be entered in Reg. Book)

Residence

Göteborg

Port of Registry

"

If surveyed while building, afloat, or in dry dock

For classification in dry dock &amp; afloat.

## 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.
FRAMES, Spacing amidships	550 ✓		Bracket Floors, Frame		
" " from $\frac{1}{2}$ length amidships to Collision bulkhead	500 ✓		" " Reversed Frame		
" " in <del>peaks</del> <i>Iron peaks</i>	500 ✓		" " Vertical Struts		
" " <i>after peaks</i>	550 ✓		Centre Girder, depth and thickness amidships		
SIDE FRAMING.			" " top Angles		
Frame Amidships, Angle, $\frac{1}{2}$ or $\frac{1}{4}$	90 75 9.5 ✓		" " bottom Angles		
" " Extends up to	<i>Deck</i> ✓		Side Girders, No. each side and thickness		
" " <i>on floor</i> <i>Hold</i>			Margin Plate depth (excl. of flange) and thickness		
Reversed Frame Amidships, Angle $\frac{1}{2}$ or $\frac{1}{4}$	75 65 6.5 ✓		" " Vertical Angle to Tank side		
" " <i>E.R.</i>	75 75 7 ✓		" " Bracket abaft $\frac{1}{2}$ len. from stem		
" " Extends up to	<i>Iron plate</i> ✓		" " Vertical Angle to Tank side		
<i>Immediate side frames all along</i>	90 75 9.5 ✓		" " Bracket from forward $\frac{1}{2}$ len. from stem to Panting Area		
Depth of Framing			" " Gussets, spacing and scantling abaft $\frac{1}{2}$ len. from stem		
Frames in Uppermost Continuous 'tween Decks, Angle, $\frac{1}{2}$ or $\frac{1}{4}$			" " Gussets, spacing and scantling from forward $\frac{1}{2}$ len. from stem to Panting Area		
" " Second 'tween Decks, Angle, $\frac{1}{2}$ or $\frac{1}{4}$			Tank Side Brackets, height above base line at toe of Frame and thickness		
" " <i>Third</i>			INNER BOTTOM PLATING.		
" " from $\frac{1}{2}$ len. for'd. to 15% len. from Stem	90 75 9.5 ✓		Breadth and thickness of Middle Line Strake		
" " <i>in Peaks, Angle</i> $\frac{1}{2}$ or $\frac{1}{4}$	85 75 9.5 90 75 9 ✓		Thickness of remainder in Holds		
Diameter and Spacing of Rivets through Frame and Shell Plating amidships	19 135-126		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?		
State if Frame Joggled	<i>Yes</i> ✓		BEAMS.		
Are the scantlings and arrangements in the Panting Area in accordance with the Rules and/or as approved?	✓		Uppermost Continuous Deck, amidships	115 65 7 ✓	
Are the scantlings and arrangements in way of the Bottom Forward in accordance with the Rules and/or as approved?	✓		" " <i>Wells, Angle, <math>\frac{1}{2}</math> or <math>\frac{1}{4}</math></i>		
" " <i>E.R.</i>	570 ✓	8 ✓	" " <i>in way of Bridge, Angle</i>		
" " <i>B.R.</i>	360 ✓	8 ✓	" " <i><math>\frac{1}{2}</math> or <math>\frac{1}{4}</math></i>		
SINGLE BOTTOM.			Spacing	<i>Iron frame</i> ✓	
Floors, Depth and thickness at mid-line in Holds	360 ✓	7 ✓	Second Deck, amidships, Angle, $\frac{1}{2}$ or $\frac{1}{4}$		
Height of Brackets at side above base line at toe of frame	<i>None</i> ✓		Spacing		
Middle Line Keelson, on Floors, Angles	100 75 8 ✓		<i>No side stringer for 41.44.46.48</i>		
" " <i>Through Plate or Inter-costal Plate</i>	7 ✓		Third Deck, amidships, Angle, $\frac{1}{2}$ or $\frac{1}{4}$	90 65 7 ✓	
" " <i>Foundation Plate on Floors</i>	<i>None</i> ✓		Spacing		
" " <i>Flat Plate Keel Angles</i>	✓		Fourth Deck, amidships, Angle, $\frac{1}{2}$ or $\frac{1}{4}$		
Side Keelsons, No. each side	<i>One</i> ✓		Spacing		
" " thickness of Intercoastal Plate	6.5 ✓		Poop Deck, Angle, $\frac{1}{2}$ or $\frac{1}{4}$		
" " Angles	75 75 7 ✓		Spacing		
DOUBLE BOTTOM.			Bridge Deck, Angle, $\frac{1}{2}$ or $\frac{1}{4}$		
Solid Floors, thickness and spacing			Spacing		
" " Are Frame and Reversed Frame joggled?			Forecastle Deck, Angle, $\frac{1}{2}$ or $\frac{1}{4}$		
Bracket Floors, breadth and thickness at middle line			Spacing		
" " breadth and thickness at margin plate					



		PILLARS OR DECKS.			
	INCHES IN SHIP.	Any Departure from Approved Plans to be Noted.		INCHES IN SHIP.	Any Departure from Approved Plans to be Noted.
PILLARS, No. of Rows .....	One.				
" in 'tween Decks, Size and Spacing .....					
" " " " " " .....					
" in Holds " " " " .....	φ 65				
" " " " " " .....	L 75 x 75 x 7				
Centre Line Bulkhead .....	on frames 41, 44, 46, 48, 50				
Stiffeners and Spacing .....	✓				
Plating, thickness of .....	✓				
STRINGERS AND DECKS.					
Uppermost Continuous Deck.					
Stringer Plate, breadth and thickness in Well .....	1170	7	8		
" " " " " in way of Bridge .....					
" Angle in Wells .....	65 65	7			
Thickness of Plating abreast Deck openings in way of Wells .....		6			
Thickness of Plating abreast Deck openings in way of Bridge .....					
Thickness of Plating within line of openings .....		5.5			
If Sheathed, material and thickness .....	no.				
Second Deck.					
Stringer Plate, breadth and thickness in Wells .....					
Stringer Plate, breadth and thickness in way of Wells .....					
Thickness of Plating abreast Deck openings in way of Bridge .....					
Thickness of Plating within line of openings .....					
If Sheathed, material and thickness .....					
Third Deck.					
Stringer Plate, breadth and thickness .....					
Thickness of Plating abreast Deck openings in way of Bridge .....					
Thickness of Plating within line of openings .....					
If Sheathed, material and thickness .....					
Fourth Deck.					
Stringer Plate, breadth and thickness .....					
Thickness of Plating abreast Deck openings in way of Bridge .....					
Thickness of Plating within line of openings .....					
If Sheathed, material and thickness .....					
Fifth Deck.					
Stringer Plate, breadth and thickness .....					
Thickness of Plating abreast Deck openings in way of Bridge .....					
Thickness of Plating within line of openings .....					
If Sheathed, material and thickness .....					
Sixth Deck.					
Stringer Plate, breadth and thickness .....					
Thickness of Plating abreast Deck openings in way of Bridge .....					
Thickness of Plating within line of openings .....					
If Sheathed, material and thickness .....					
Seventh Deck.					
Stringer Plate, breadth and thickness .....					
Thickness of Plating abreast Deck openings in way of Bridge .....					
Thickness of Plating within line of openings .....					
If Sheathed, material and thickness .....					
Eighth Deck.					
Stringer Plate, breadth and thickness .....					
Thickness of Plating abreast Deck openings in way of Bridge .....					
Thickness of Plating within line of openings .....					
If Sheathed, material and thickness .....					
Ninth Deck.					
Stringer Plate, breadth and thickness .....					
Thickness of Plating abreast Deck openings in way of Bridge .....					
Thickness of Plating within line of openings .....					
If Sheathed, material and thickness .....					
Tenth Deck.					
Stringer Plate, breadth and thickness .....					
Thickness of Plating abreast Deck openings in way of Bridge .....					
Thickness of Plating within line of openings .....					
If Sheathed, material and thickness .....					
Eleventh Deck.					
Stringer Plate, breadth and thickness .....					
Thickness of Plating abreast Deck openings in way of Bridge .....					
Thickness of Plating within line of openings .....					
If Sheathed, material and thickness .....					
Twelfth Deck.					
Stringer Plate, breadth and thickness .....					
Thickness of Plating abreast Deck openings in way of Bridge .....					
Thickness of Plating within line of openings .....					
If Sheathed, material and thickness .....					

SCANTLINGS.								RIVETING.						
STRAKES.	AS IN VESSEL.				ANY DEPARTURE FROM APPROVED PLANS TO BE NOTED.	EDGES.			BUTTS.					
	AMIDSHIPS.		FORWARD.	AFT.		State if Joggled?	SINGLE OR DOUBLE.		RIVETS.		No. of ROWS OF RIVETS.	RIVETS.		STRAPPED 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.....														
" Dblg. (if any)		✓			<i>Garboard strake } to bar unit.</i>	<i>D.</i> ✓	25	125						
<i>Garboard (A), B, C.</i>						<i>S.</i> ✓	19	69	2	19	66	<i>Lap</i>		
Bottom Plating, No. of Strakes ..... }	10	✓	9-12	9		<i>S.</i> ✓	19	69	2	19	66	"		
Bilge Plating, No. of Strakes <i>D...Cm.</i> }	11	✓	12	8.5		<i>S.</i> ✓	19	69	2	19	66	"		
Side Plating, No. of Strakes <i>E</i> ..... }	12.5	✓	12.5	11		<i>S.</i> ✓	19	69	2	19	66	"		
Upper Deck, Sheer-strake in Well <i>G</i> }	910	✓	13.0	12	12	<i>S.</i> ✓	13.5	59	2	19	66	"		
Upper Deck, Sheer-strake in Bridge ... }														
Strake below Sheer-strake in Well <i>F</i> }	950	✓	13	12	12	<i>S.</i> ✓	19	69	2	19	66	"		
Strake below Sheer-strake in Bridge ... }														
Poop Side Plating.....														
Bridge Side Plating.....														
Forecastle Side Plating														

Total No. of W.T. BULKHEADS in Vessel— 5 (No. 7, 15, 36, 43/42, 54)  
 Extending to Upper Deck (Sec. 3 c) 5.  
 „ Deck next below ✓  
 As per Rule 4.

	Casting or Forging.	Scantling.	Maker's Name.	Any Deps. from App'l Plans to be
KEEL, Bar .....		150 x 37 ✓		
STEM .....		150 x 37 ✓		
STERN FRAME	Propeller Post	Casting 150 x 105		
	Rudder	150 x 80 ✓		
Speed of Vessel	max.	11 knots. ✓		
RUDDER—Type	Ordinary			
		$100 \times A \times D = 100 \times 2.645 \times 0.57 = 150$		
" Diam. of head .....		125 ✓		
" Rudder frame		125 x 90 ✓		
" <del>Sample</del> at top pintle				
" " heel .....		80 x 70 ✓		
" " how constructed		Irregular frame, 2 arms x pintle		
" double <del>single</del> plate		10 ✓		
" coupling, vertical or		Horizontal.		
" horizontal				

		Plating Thickness.	STIFFENERS.					
			VERTICAL.		HORIZONTAL.			
			Scantlings.	Spacing.	Scantlings.	Spacing.		
MIDSHIP	BULKH'D, Upper 'tween decks							
"	" Second "							
"	" Third "							
"	" Holds <i>fr 36</i>	<i>70, 60</i>	<i>100</i>	<i>75</i>	<i>8</i>	<i>580-725</i>	<i>None</i>	
	COLLISION "	<i>fr 54</i>	<i>75, 7</i>	<i>100</i>	<i>75</i>	<i>9</i>	<i>580-600</i>	"
	AFTER PEAK "	<i>fr 7</i>	<i>75, 7</i>	<i>95</i>	<i>75</i>	<i>75</i>	<i>600</i>	"

STEEL.	Manufacturer's Name or Trade Mark of the Steel used in the construction of the Vessel (state process of manufacture)
	Not stated.
	Has the Steel been tested as required by the Rules?

[illegible]

Number of Certificate.	Length and size supplied.		Test per Certificate.		WEIGHT OF CHAIN CABLE.		Length and Size per Table 52.		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.	Stati- tory.	Break- ing.	Supplied.	Per Rule.	Length.	Diam.					Length.	Cir.		Tons.	Fathoms.	Ins.	Tons.	Fathoms.	Ins.
✓	180	28-29	22	-	✓	34	75	19/16	2nd link.	Not stated.		TOWLINE	60	8		60	5 1/2				
												HAWSERS & WARPS	60	6		60	5 1/2				
												"	2 x 90	4		60	3 1/2				
												"	2 x 90	3							
on Stream } Chain or Steel Wire }		Cir.							Cir.												

Number of Certificate.	Length and size supplied.		Test per Certificate.		WEIGHT OF CHAIN CABLE.		Length and Size per Table 52.		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.	Stati- tory.	Break- ing.	Supplied.	Per Rule.	Length.	Diam.					Length.	Cir.		Tons.	Fathoms.	Ins.	Tons.	Fathoms.	Ins.
✓	180	28-29	22	-	✓	34	75	19/16	2nd link.	Not stated.		TOWLINE	60	8		60	5 1/2				
												HAWSERS & WARPS	60	6		60	5 1/2				
												"	2 x 90	4		60	3 1/2				
												"	2 x 90	3							
on Stream } Chain or Steel Wire }		Cir.							Cir.												

Steering Gear, Type (Power or hand) *Steamer; none.* Alternative Means of Steering *Blocks & tackle to after mizzen.*

Steering Chains (Size and Test) *19 mm (none)* Windlass *Steamer.* Boats *One.*


Ceiling in Holds, thickness and material *2 1/2" Swedish Pine.* Cargo Battens, thickness, material and spacing *Pine Pine 6 x 1 1/2" = 6"*

Coaming 9' 00 high of *Steel 7.8 mm, with brass bar all round 135 x 75 x 11, Pn added.* Thickness of Hatches *Steel 7.5 mm stiff.*

Cargo Hatchways, —(Upper Deck)

Size of Hatchways No. 1 (Fwd.) *1850 x 3000* No. 2 No. 3 No. 4 No. 5 No. 6

Number of Shifting Beams } *None.*  
and/or Fore and Afters }

Builder's Signature 

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. No.  
(b) whether the vessel, not being an oil tanker, is fitted for carrying oil as cargo. No. The positions in which oil is carried as fuel or cargo should be indicated, together with the flash point (where required to be inserted in the Notation).

A tug was placed in dry dock for reconditioning and carrying out extensive damage repairs to a shell, port side, amidships, in segment to refloating. All wood lining in accommodations, also lining and cargo battens in the hold were removed. Bunkers cleaned, both sides; in port bunkers bottom cementing was removed for the whole length of the bunkers. Surfaces of the hole of inside steel construction were completely exposed, except bottom cementing elsewhere. Corrosion was removed throughout inside and outside. A number of test holes were drilled in shell, deck & bulkheads and soundings ascertained, steel work examined throughout. Soundings & arrangements are in accordance with, equivalent to or slightly below, those forward, beam truss, (bid. plating) those shown on the noted plans, but in all cases within limits allowed for vessels of this age. Workmanship and material, so far as could be ascertained, are satisfactory. R.P.T. was tested as required by Rules. Steering gear and indicators were examined under working conditions. The vessel was undocked on the 2nd May.



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 following plans are forwarded:-

- 1/ Midship section.
- 2/ Profile.
- 3/ Shell expansion.
- 4/ Main Deck.
- 5/ Rudder.
- 6/ Three bulkhead sketches.

PARTICULARS OF ELECTRIC WELDING (if employed)

SPECIAL NOTATIONS:—Either as part of the vessel's class or for record in the Register Book

Cruiser stern.

Vessel equipped with: Winches, Direction Finder, Echo Sounding Device.

RADAR Equipment (State if fitted)

State Type or Pattern No.

State } Maker  
Name } and/or  
of } Supplier

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

1st Bower

2nd „

3rd „

PARTICULARS FOR RECORD in the REGISTER BOOK.—Length of Poop ☒ ft., R.Q.D. ☒ ft., Bridge ☒ ft., Forecastle ☒

(in feet and tenths). When the Poop or Forecastle are joined to the B.D., this should be distinctly stated ☒

Official No. 5864 Signal Letters SIER Extreme Breadth over Belting 22.4' Over-all Length 106.2'

No. and Material of Decks One steel deck

Parts of Bottom of Vessel coated with cement or approved composition Whole bottom from peak to peak between side keelsons heavily coated with cement, APT cement washed.

Particulars of composition (if fitted) and of approval

PARTICULARS OF WATER BALLAST:—(Comprising all tanks which may be used for Water Ballast. (Circ. 1284) Wells are not to be included in the lengths of the tanks, but Cofferdams and Dry Tanks (if tested) are to be included)

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,	✓	22
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 length (if continuous) and Capacity			(If necessary furnish further information by sketch.)		

Order for Special Survey No. ✓

Date ✓

Dates of Surveys held while building

From 19<sup>th</sup> April to 23<sup>rd</sup> May, 1949.

Total No. of Visits 1