

IRON SHIP.

No. 37 Survey held at Gothenburg Date, First Survey 19 April 1880 Last Survey 4th of November 1880
 the Steam Ship Norvolsky Master B. Schwarz
 AGE under Tonnage Deck 1144.62 ONE, OR TWO DECKED, THREE DECKED VESSEL.
 to of Third, Spar, or Awning Deck. 138.15 SPAR, OR AWNING-DECKED VESSEL.
 Ditto of Poop, or Raised Qr. Dk. 1304.77 HALF BREADTH (moulded)... 16.25
 Ditto of Houses on Deck 46.49 DEPTH from upper part of Keel to top of Upper Deck Beam 20.10
 Ditto of Forecastle 1258.28 GIRTH of Half Midship Frame (as per Rule) 32.6
 Gross Tonnage 274.82 1st NUMBER 62.91
 Less Crew Space 983.46 1st NUMBER, if a THREE DECKED VESSEL 11561.6
 Less Engine Room 274.82 2nd NUMBER 11561.6
 Register Tonnage (as cut on Beam) 983.46 PROPORTIONS—Breadths to Length 7.39
 Depths to Length—Upper Deck to Keel 11.91
 Main Deck ditto 11.91

Built at Lindholmen Works
 When built 1880 Launched 2nd 1880
 By whom built Motala Company
 Owners Norvolsky & Palaschkeffsky
 Port belonging to Petersburg
 Destined Voyage Riga
 If Surveyed while Building, Afloat, or in Dry Dock.

Feet.	Inches.	Feet.	Inches.	Feet.	Inches.	Feet.	Inches.	Power of Engines	Horse.	N ^o . of Decks with flat laid	N ^o . of Tiers of Beams
Length of Ship per Register, length, <u>251.8</u>		Breadth, <u>33.2</u>		Depth, <u>19.93</u>							
KEEL, depth and thickness	8" x 2 1/2"	8" x 2 1/2"	8" x 2 1/2"	8" x 2 1/2"	8" x 2 1/2"	8" x 2 1/2"	8" x 2 1/2"				
TEMP, moulding and thickness	8" x 2 1/2"	8" x 2 1/2"	8" x 2 1/2"	8" x 2 1/2"	8" x 2 1/2"	8" x 2 1/2"	8" x 2 1/2"				
ERN-POST for Rudder do. do.	8 1/4" x 5 1/4"	8 1/4" x 5 1/4"	8 1/4" x 5 1/4"	8 1/4" x 5 1/4"	8 1/4" x 5 1/4"	8 1/4" x 5 1/4"	8 1/4" x 5 1/4"				
for Propeller	8 1/4" x 5 1/4"	8 1/4" x 5 1/4"	8 1/4" x 5 1/4"	8 1/4" x 5 1/4"	8 1/4" x 5 1/4"	8 1/4" x 5 1/4"	8 1/4" x 5 1/4"				
Distance of Frames from moulding edge to moulding edge, all fore and aft	22"	22"	22"	22"	22"	22"	22"				
AMES, Angle Iron, for 1/2 length amidships	4" 3/4"	4" 3/4"	4" 3/4"	4" 3/4"	4" 3/4"	4" 3/4"	4" 3/4"				
Do. for 1/2 at each end	3"	3"	3"	3"	3"	3"	3"				
VERSED FRAMES, Angle Iron	3"	3"	3"	3"	3"	3"	3"				
LOORS, depth and thickness of Floor Plate at mid line for half length amidships	21"	21"	21"	21"	21"	21"	21"				
thickness at the ends of vessel	10 1/2"	10 1/2"	10 1/2"	10 1/2"	10 1/2"	10 1/2"	10 1/2"				
depth at 1/2 the half-bath, as per Rule	42"	42"	42"	42"	42"	42"	42"				
height extended at the Bilges	42"	42"	42"	42"	42"	42"	42"				
BEAMS, Upper, Spar, or Awning Deck Single or double Ang. Iron, Plate or Tee Bulb Iron	8"	8"	8"	8"	8"	8"	8"				
Single or double Angle Iron on Upper edge	3"	3"	3"	3"	3"	3"	3"				
Average space	46"	46"	46"	46"	46"	46"	46"				
BEAMS, Main, or Middle Deck Single or double Ang. Iron, Plate or Tee Bulb Iron	8"	8"	8"	8"	8"	8"	8"				
Single or double Angle Iron, on Upper Edge	3"	3"	3"	3"	3"	3"	3"				
Average space	46"	46"	46"	46"	46"	46"	46"				
BEAMS, Lower Deck, Hold, or Orlop Single or double Ang. Iron, Plate or Tee Bulb Iron	8"	8"	8"	8"	8"	8"	8"				
Single or double Angle Iron on Upper Edge	3"	3"	3"	3"	3"	3"	3"				
Average space	46"	46"	46"	46"	46"	46"	46"				
KEELSONS Centre line, single or double plate, box, or intercostal, plates	16"	16"	16"	16"	16"	16"	16"				
Rider Plate	10"	10"	10"	10"	10"	10"	10"				
Bulb Plate to Intercostal Keelson	4 1/2"	4 1/2"	4 1/2"	4 1/2"	4 1/2"	4 1/2"	4 1/2"				
Angle Irons	4 1/2"	4 1/2"	4 1/2"	4 1/2"	4 1/2"	4 1/2"	4 1/2"				
Double Angle Iron Side Keelson	4 1/2"	4 1/2"	4 1/2"	4 1/2"	4 1/2"	4 1/2"	4 1/2"				
Side Intercostal Plate	4 1/2"	4 1/2"	4 1/2"	4 1/2"	4 1/2"	4 1/2"	4 1/2"				
do. Angle Irons	4 1/2"	4 1/2"	4 1/2"	4 1/2"	4 1/2"	4 1/2"	4 1/2"				
Attached to outside plating with angle iron	4 1/2"	4 1/2"	4 1/2"	4 1/2"	4 1/2"	4 1/2"	4 1/2"				
BILGE Angle Irons	4 1/2"	4 1/2"	4 1/2"	4 1/2"	4 1/2"	4 1/2"	4 1/2"				
do. Bulb Iron	8"	8"	8"	8"	8"	8"	8"				
do. Intercostal plates riveted to plating for 1/2 length	4 1/2"	4 1/2"	4 1/2"	4 1/2"	4 1/2"	4 1/2"	4 1/2"				
BILGE STRINGER Angle Irons	4 1/2"	4 1/2"	4 1/2"	4 1/2"	4 1/2"	4 1/2"	4 1/2"				
Intercostal plates riveted to plating for 1/2 length	4 1/2"	4 1/2"	4 1/2"	4 1/2"	4 1/2"	4 1/2"	4 1/2"				
SIDE STRINGER Angle Irons	4 1/2"	4 1/2"	4 1/2"	4 1/2"	4 1/2"	4 1/2"	4 1/2"				
Transoms, material. Knight-heads. Hawse Timbers.											
Windlass <u>Harfield's Patent</u> Pall Bitt											

The FRAMES extend in one length from Keel to Maindeck Riveted through plates with 3/4 in. Rivets, about 2 1/2 apart.
 The REVERSED ANGLE IRONS on floors and frames extend from middle line to Maindeck and to upper edge of hold
 KEELSONS. Are the various lengths of Plates and Angle Irons properly connected? Yes And butts properly shifted? Yes
 PLATING. Garboard, double riveted to Keel, with rivets 1 1/8 in. diameter, averaging 5 ins. from centre to centre.
 Edges of Garboards and to upper part of Bilge, worked clencher, double riveted; with rivets 3/4 in. diameter, averaging 2 3/4 ins. from centre to centre.
 Butts from Keel to turn of Bilge, worked carvel, double riveted; with rivets 3/4 in. diameter averaging 2 3/4 ins. from centre to centre.
 Butts of 3 Strakes at Bilge for 1/2 length, treble riveted with Butt Straps 1/4 thicker than the plates they connect.
 Edges from bilge to Main Sheerstrake, worked clencher, double or single riveted; with rivets 3/4 in. diameter, averaging 2 3/4 ins. from cr. to cr.
 Butts from Bilge to Main Sheerstrake, worked carvel, double riveted; with rivets 3/4 in. diameter, averaging 2 3/4 ins. from cr. to cr.
 Edges of Main Sheerstrake, double or single riveted. Upper Sheerstrake, double or single riveted.
 Butts of Main Sheerstrake, treble riveted for 1/2 length amidships. Butts of Upper or Spar Sheerstrake, treble riveted 1/2 length amidships.
 Butts of Main Stringer Plate, treble riveted for 1/2 length amidships. Butts of Upper or Spar Stringer Plate, treble riveted for 1/2 length.
 Breadth of laps of plating in double riveting 4 1/2 Breadth of laps of plating in single riveting 2 3/8
 Butt Straps of Keelsons, Stringer and Tie Plates, treble, double or single Riveted?
 how secured to Beams Riveted (Explain by Sketch, if necessary.)
 Beams of the various Decks, how secured to the sides? Riveted by Brackets No. of Breasthooks, 3 Crutches, 2
 What description of Iron is used for Frames, Beams, Keelsons, Tie, and Stringer Plates, Outside Plating, &c.? Swedish Bessemer Steel
 Manufacturer's name or trade mark, Motala Steel and Iron Company
 The above is a correct description.
 Builder's Signature, _____ Surveyor's Signature, C. A. Moller
 Surveyor to Lloyd's Register of British and Foreign Shipping.

IRON 497-0051

Workmanship. Are the butts of plating planed or otherwise fitted? *Planed*

Do the edges of the carvel work and of the butts lay close together throughout their length without requiring any making good of deficiencies? *Yes*

Are the fillings between the ribs and plates solid single pieces? *Yes*

Do the holes for riveting plate to frames, butt straps, or plate to plate, &c., conform well to each other? *Yes*

Are the rivet holes well and sufficiently countersunk in the plate and punched from the faying surfaces? *Yes*

Do any rivets break into or through the seams or butts of the plating? *No*

285#5 Iron

Masts, Bowsprit, Yards, &c., are of *Iron* in *Good* condition, and sufficient in size and length. If of Iron or Steel give Scantlings of Plating, Angle Irons, &c., and further explain by a Sketch showing how the lower Masts and Bowsprit are constructed, showing the number of Plates and Angle Irons, mode of riveting, quality of Materials, and if stamped with Maker's name.

State also Length and Diameter of Lower Masts and Bowsprit

Foremast 70 feet 25 1/2" x 3/8"

Mainmast 67 feet 25 1/2" x 3/8"

The Masts are built in accordance with the Rules

NUMBER for EQUIPMENT <i>18217</i>		Fathoms.	Inches.	Test per Certificate.	Length & Size req'd pr Rule.	Test req'd per Rule.	ANCHORS.	N ^o .	Weight. Ex. Stock.	Test per Certificate.	W'ght req'd per Rule.	Test req'd per Rule.
SAILS.							Bowers	1	23.2.12	23.15.2.14	2 1/2 25 1/2	20%
CABLES, &c.		270	1 1/4	61.8	2.70 x 1 1/4	61.8		1	23.2.1	23.11.2.14	1 1/2 20	20
Chain		75 1/2	1	24.12	75 x 1	42 7/10		1	20.0.0	20 3/4		
Fore Sails,		75	3/8	12				1	20.0.0	20 3/4		
Fore Top Sails,		75	3/8	12				1	20.0.0	20 3/4		
Fore Topmast Stay Sails		90 x 107 1/2			90 x 10			1	20.0.0	20 3/4		
Main Sails,		90 x 94			90 x 8		Stream	1	4.1.9	10 1/2	1 1/2 8	10 1/10
Main Top Sails,		90 x 6			90 x 6		Kedges	1	4.0.7	6 1/2	1 1/2 4	6 1/20
Hmpn Strm Cbl		120 x 1 1/4						1	20.0.9	4.12.2.0	1 1/2 2	4 1/2
Hawser ...		90 x 94										
Towlines ...		90 x 6										
Warp ...		120 x 3 1/4										
quality		120 x 1 1/4										

Standing and Running Rigging of Wire and Hemp is sufficient in size and *Good* in quality. She has *2 1/2 26'* Long Boat and *1 1/2 20'*

The Windlass is *Good* Capstan *Good* and Rudder *Good* Pumps *Good*

Engine Room Skylights.—How constructed? *Steel Trunk and Wood Siding* How secured in ordinary weather? *Dead Lights*

What arrangements for deadlights in bad weather? *Secured*

Coal Bunker Openings.—How constructed? *Steel Trunk to Bunkers* How are lids secured? — Height above deck? —

Scuppers, &c.—What arrangements for clearing upper deck of water, in case of shipping a sea? *Waterports and Scuppers*

Cargo Hatchways.—How formed? *Steel framed 2' high*

State size Main Hatch *36' x 11'-6"* Forehatch *17' x 9'-6"* Quarterhatch *24' x 10'*

If of extraordinary size, state how framed and secured? *Steel Deck and 2 Web plates*

What arrangement for shifting beams? *Bolts to double angles*

Hatches, If strong and efficient? *Yes 2 1/2" Solid*

Order for Special Survey No.	DATES of Surveys held while building as per Section 18.	1st. On the several parts of the frame, when in place, and before the plating was wrought	<i>4th of June 1880</i>
Date		2nd. On the plating during the process of riveting	<i>1st of July 1880</i>
Order for Ordinary Survey No.		3rd. When the beams were in and fastened, and before the decks were laid....	<i>15th of July 1880</i>
Date		4th. When the ship was complete, and before the plating was finally coated or cemented..	<i>16th of Aug 1880</i>
No. in builder's yard.		5th. After the ship was launched and equipped	<i>22nd of Oct 1880</i>

and there to 2 or 3 times in the week from the 19th of April to this date

General Remarks (State quality of workmanship, &c.)

The Ship is built of Steel tested in accordance with the Rules and Report. The Plates are in two sides stamped with Lloyd's Steel Brand and the Manufacturers Trade Mark.

She has one deck and rigged as schooner

The Bridgehouse is 33 feet and the forecath 23 feet in length

The Material and Workmanship is of good quality and the Vessel in a good and efficient state fit for the conveyance of dry and perishable goods to and from all parts of the world.

The Plans to this Ship are approved by the Committee the 4th of March 1880.

State if one, two, or three, decked vessel, or if spar, or awning decked; and the lengths of poop, forecath, or raised quarter deck, and the length of double, or part double bottom.

How are the surfaces preserved from oxidation? Inside *Bottom Cement* Inside *Red Lead* Outside *Red Lead*

I am of opinion this Vessel should be Classed *100 A1*

The amount of the Entry Fee ... £ *5* : : is received by me, *L. A. Moller*

Special ... £ *57* : *12* : *11th Nov 1880*

Certificate ... £ *5* : *Do Letter annexed*

(Travelling Expenses, if any, £ *1.11*.) £ *62.17*

Committee's Minute *Friday November 26 1880*

Character assigned *100 A1*
Lloyd's Register
Steel
T.B.

This vessel appears to be classed 100 A1
Lloyd's Register
Foundation