



SPECIFICATION
FOR
300x80x18 FT DECK CARGO BARGE

DECK LOADING: 7T/M²

HULL NO.:

DRAWING NO.: G-100-01SPEC

Rev. 1

11 Sept. 2024



SECTION 1 - GENERAL

1.1 Intent & Definition

This specification together with the drawings is to describe the construction of an unmanned cargo barge suitably equipped for carry deck cargo for unrestricted services.

1.2 General Description

The vessel is to be all welded structure with 2 skegs.

The hull is to be divided by 8 transverse watertight bulkheads and 3 longitudinal watertight bulkheads into 33 void compartments.

1.3 Principal Particulars

Length overall	300 ft
Beam moulded	80 ft
Depth moulded	18 ft
Draft moulded	4.28m
Dead Weight	7500T(Approx.)

1.4 Classification

The vessel is designed suitable for registration as a deck cargo barge and constructed in accordance with the latest rules and regulations of ABS for Unrestricted Services and to their special survey to hull for Class for Unmanned Deck Cargo Barge.

Notation Symbol: ABS A1+ Barge, Unmanned

1.5 Certification & Registration

The following original certificates should be supplied to the Owner in duplicate before the delivery of the vessel. Should the original not available, certified true copy is acceptable:

- 1) Builder Certificate;
- 2) Class Certificate;
- 3) Safety Construction Certificate;
- 4) International Tonnage Certificate;
- 5) International Loadline Certificate;
- 6) Stability Booklet ;

1.6 Welding

Except where specified otherwise, electric welding shall be employed in the construction of the vessel. All electrodes used shall be of type approved by the classification society. Automatic welding method to be used as far as possible throughout construction where possible. Structure should be pre-fabricated in assemblies and sub-assemblies to give the, maximum possible amount of down hand welding. Welding schedules to meet classification requirement/standard.



1.7 Materials & Workmanship

All material and workmanship are of the good quality. All steel plates, section, full forging and castings are to meet ABS Classification Requirement.

1.8 Inspection

Throughout the construction period and at anytime prior to the delivery, the classifications Surveys and Owner's representatives are to be given free access, within normal working hours, to the builder's yard for supervision and inspection.

1.9 Test

Prior to the delivery, the hull and other fittings are to be thoroughly tested to be satisfaction of the classification's attending surveyor.

1.10 Stability

A lightship measurement will be conducted which will ascertain the lightship weight and the centre of gravity at lightship condition, is to be carried out by the Builder's with the presence of the classification surveyor. Based on these results, a stability report is to be prepared by consultant.

1.11 Delivery

Delivery of the vessel is to be taken afloat at agreed jetty after completion.

SECTION 2 - STRUCTURE

2.1 General

The steel hull and deck erection are of all welded construction. Longitudinal framing system is used. The deck scantlings are to be designed to suit 7T/M² loading.

2.2 Plating

Deck	14.0MM
Bottom	12.0MM
Side	12.0MM
Longitudinal BHD	8.0MM
Transverse BHD	8.0MM

2.3 Longitudinal

Deck longitudinal	L125x75x7
Bottom longitudinal	L125x75x10
Side longitudinal	L125x75x7
Long. BHD longitudinal	L125x75x7
Transv. BHD stiff.	L125x75x7



2.4 Transverse Webs

Deck transverse	450x9.5+100FLG
Deck girder	450x9.5+100FLG
Bottom transverse	450x9.5+100FLG
Bottom girder	450x9.5+100FLG
Side transverse	450x9.5+100FLG
Long. BHD transverse	450x9.5+100FLG
Transv. BHD vertical web	450x9.5+100FLG

2.5 Stanchions

Stanchion	250x9.5+250FLG
Diagonals	150x9.5+150FLG
Bilge round bar (Double Chine)	50mm Dia.

2.6 Doubler / Fender

All the edges of the deck to be covered with L150x90x10 angle bar. Flat bar of 450x12 to be welded on both sides shell below the angle bar.

2.7 Hull Marking

The barge name and Port of Registry shall be welded to the stem & both sides of the bow. They shall be of 8mm plate with the barge's name letter 300mm and Port of Registry 125mm height.

2.8 Draft Marks & Loadline

8mm plate shall be welded to the hull in accordance with the authority.

2.9 Sideboard

L x B x H	82.35m×21.96m×3.00m
Plate	8mm
Longitudinal	L100x75x7/L150x90x9(Top)
Stays	H200X200X8/12

SECTION 3 – Deck Machinery & Equipment

3.1 General

All deck machinery and equipment are supplied by Seller and installed to meet Classification's requirements.

3.2 Deck Fittings

1) Mooring Bollards

Mooring bollards of 12' N.B. Heavy Duty Pipe are fitted on main deck as shown on the

GENERAL ARRANGEMENT PLAN.

2) Fender/Lugs

Suitable numbers of used heavy duty tires to be provide as shown on drawing. Suitable no. of small lugs of 16mm c/w doublers 16mm for lashing go portable tyre fenders welded to deck are to be provided along the sides of the vessel.

3) Towing Brackets

Four (4) 40T Smite towing brackets are fitted on main deck Fwd & Aft (P&S).

4) Anchor winch, Anchor, Anchor Chain (Mooring at quay)

Anchor Winch

One unit of 10T Diesel engine driven anchor winch to be fitted on main deck in winch house.

Anchor

One (1) unit of 1920Kg stockless bower anchor to be fitted in anchor pocket.

Anchor Chain

Anchor chain - 5 lengths x 27.5mm of 36mm chain AM2 to be provide in chain locker.

Chain Stopper-One (1) unit chain stopper to suit the chain size to be fitted.

5) Manhole

One (1) manhole is to be provided for each tank, size of manhole to be 600mm x 400mm clear opening. Studs and nuts to be 316 stainless steel.

6) Navigation Lights

A complele set of solar navigation lights fitted c/w stands and battery boxes are to be provided as follows.

- Stern light
- Bow Light (P & S)

SECTION 4 – PAINTING & CATHODIC PROTECTION

4.1 Painting

All new steel plate surface (on both side) are to be sand blasted to S.A2.5 ISO 8501-1 and primed before fabrication with one (1) coat of shop primer. After fabrication, all weld seams, damage, burnt areas to be blasted to S.A2.5 or power tool cleaned to ST3.0 where appropriate, ensuring all areas are rendered clean. Free of oil/ grease rust and residual dirt, and to be dry prior to painting. JOTUN, Hempte, IP or other equivalent.

The below paint schedule for guidance only.

EXTERNAL HULL - Bottom and below water line

- | | |
|--------------------------------------|---------|
| - 1 full coat of Intergard 7600 | 125 mic |
| - 1 full coat of Intergard 5263 | 75 mic |
| - 1 full coat of A/F Interspeed 6200 | 125 mic |
| - 1 full coat of A/F Interspeed 6200 | 125 mic |



EXTERNAL HULL – Topside (above light water line)

- 1 full coat of Intergard 7600 125 mic
- 1 full coat of Intergard 7600 125 mic

EXTERNAL – Main deck and internal sideboard

- 1 full coat of Intergard 7600 75 mic
- 1 full coat of Intergard 740 75 mic

EXTERNAL Sideboard

- 1 full coat of Intergard 7600 100 mic
- 1 full coat of Intergard 740 100 mic

VOID TANK (Use China paint brand as to builder recommendation)

- 1 full coat of black/grey coating Intergard 7600 100 mic

4.2 CATHODIC PROTECTION

Fifty (50) zinc anodes (15kg/pc) are to be fitted to protect the external hull below the waterline against corrosion.