



BASIC DESIGN		210'x70'x14' DECK CARGO BARGE		OWNER:		
				CLASS:	ABS	
DESIGNED		SPECIFICATION		HULL No.		
CHECKED				DWG No.	G-100-01SPEC	
APPROVED				PAGE	REV.	SCALE
CHK OF STD.				1/4	1	NTS
VERIFIED						
DATE						

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 two (2) skegs.

The hull is to be divided by 6 transverse watertight bulkheads and two (2) longitudinal watertight bulkheads into 21 void compartments.

1.3 Principal Particulars

Length overall	210'
Beam moulded	70'
Depth moulded	14'
Deck Loading	20.0 T/M ²

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 (hereinafter referred to as Classification or Class) for Unrestricted Services and to their special survey to hull for class for Unmanned deck cargo barge.

Notation Symbol: + A1 BARGE, UNMANNED

1.5 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.

1.6 Materials & Workmanship

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

1.7 Test

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

1.8 Stability

The stability booklet is to be prepared and supplied by the builder based on the estimated lightship weight or the results from lightship Survey if when required by the Classification.

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 20T/M² loading.

2.2 Plating

Deck	16.0mm
Bottom	12.0mm
Side	12.0mm
Longitudinal BHD	10.0mm
Transverse BHD	10.0mm

2.3 Stanchions

Vertical	H200x200x12/12
Bilge Chine	50mm dia. R.B.

2.4 SKEG

Skegs shall be fitted port and starboard. The internal hull shall be suitably stiffened to provide good protection if the vessels runs aground.

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) Bollards

Eight (8) double bits bollards of Dia.12" Heavy Duty Pipe are to be fitted on main deck as shown in the drawing.

2) Towing

Four (4) 20T SWL Smite towing brackets are fitted on main deck Fwd & Aft (P&S).

3) Anchor & anchor winch and anchor wire rope

1x1500Kg stockless anchor to be installed on anchor rack at bow center.

One 10T diesel engine driven anchor winch to be provided.

One 80m, dia. 28mm steel wire rope to be provided.

4) Fender

One flat bar fender of sized 12x350 on portside/starboard 200mm below main deck.

5) Manhole

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

6) Navigation Lights

One set of solar type navigation lights. Include p & s lights and aft light.

Bow lights (port and starboard)

Stern light

7) Tonnage & Cargo VCG

The tonnage and cargo VCG above deck with respect to the moulded draft are to be welded on deck.

SECTION 4 – PAINGING & CATHODIC PROTECTION

4.1 Surface Preparation

All steel plates of hull and all steel materials of sideboard are to be sand blasted.

All part of steel materials are to be cleaned to as a high standard as possible in order to remove all the dust prior to painting with marine primer. All steel surfaces are to be free from grease and free from moisture before priming coats are applied. All coats are to thoroughly dry before further coats are applied on top.

The detailed paint schedule to be confirmed by the paint maker, shipyard and ship owner.

4.2 Cathodic protection

Twenty-two (22) zinc anodes (12kg/pc) are to be fitted to protect the external hull below the waterline against corrosion.