

Ocean 333 Particulars



The Ocean 333 is designed and built as a steel, sub-divided flat top deck barge for the transportation of a diverse range of cargoes such as high volume, high vertical centre of gravity project cargo including pre-assembled modules (PAMs) as well containers, tubular, heavy steel structures and other heavy cargo on skids or wheeled.

The barge is not self-propelled and is moved by harbour or ocean-going tugs.

The Ocean 333 is fitted with auxiliary power for ballast, mooring, lighting and hydraulic equipment.

The Ocean 333 is in Lloyds Register survey and is a registered Australian vessel at the Port of Dampier. The classification of the operational area of the Ocean 333 is 'unlimited'.

The Ocean 333 is designed for RORO and LOLO cargo operations.

The Ocean 333 has its own mooring system including 4 tension winches.

The barge has a reinforced steel deck with a capacity of 20 tonnes/m². It is fitted with two ramp arrangements – one at the bow and one at the stern.

The bow ramp consists of a powered winch operated deck ramp that provides routine use for cargo exchange to a shore ramp. The permanent bow ramp has a width of 8.70 metres and a length of 13.40 metres.

The stern ramp is not ordinarily fitted for service. It is a flexible ramp option that consists of portable pontoon sections for special project cargo. The portable sections can also be used to make the bow ramp wider for special project cargo such as PAMs.

The barge is sub-divided into tanks, cofferdams and the machinery space. The machinery space contains all auxiliary machinery, sea chest valves, switch board and pipeline crossovers.

Machinery space access is enabled through two deckhouses located near the port and starboard bows. Access to the machinery space can be from either deckhouse protected by watertight doors.

At the starboard side deckhouse there is also a deck store accessible from the main deck. At the port side deckhouse there is an office with a work station.

A portable sea container containing additional deck stores is ordinarily located on deck – the container will be used to store stevedoring equipment.

The barge has its own loading computer with a Class approved trim and stability program.

The barge is fitted with numerous Class approved lashing points on the main deck suitable for project cargo as well as container lashing points.

The Ocean 333 deck arrangement includes two anchor windlasses/self-tensioning mooring winches at the bow and two self-tensioning mooring winches at the stern. All mooring winches are fitted with warping drums and adjacent bits and fairleads.

The Ocean 333 has a fixed fender arrangement plus four portable Yokohama floating fenders for trans-shipment operations located on board and a further two portable Yokohama fenders.

The barge is rigged with Smit deck brackets and a Class-approved heavy ocean towing hawse forward. The barge is also fitted with towing brackets at the stern with towing chains and is readily rigged for an emergency towing bridle aft.

The barge is side-walled with rails. Portable stanchions with chains to wall off the stern mooring equipment and access during operations.

Deck mooring equipment is operated by hydraulic units powered from the switchboard in the main machinery space. Generator power is from two auxiliaries on board located in the machinery space and alternatively the barge can be connected to shore mains power.

The bow ramp is stowed in the upright position for manoeuvring and is stowed with a pin and support bar attachment to the A Frame on each side of the door. The permanent bow ramp has a width of 8.70 metres and a length of 13.40 metres.

The bow ramp is capable of being expanded temporarily for very large modular cargo exchange by the insertion of two adjacent portable ramp sections - one each side. Each portable ramp section is 4.35 metres wide and 13.4 metres in length and is positioned by crane. Outboard sections have side rails. Forward ramp: Steel length 13.4m x width 8m. Can be widened by portable pontoons to a maximum width of 18m. Maximum ramp angle is +/- 25 degrees.

Aft ramp: Steel made up of portable pontoon sections to a length 13.4m x up to 15m width. Maximum ramp angle is +/- 25 degrees.

With correct rigging these ramps are sufficient to handle very high weights on multi-axle loads such as giant pre-assembled modules with weights to 3000 tonnes.

IMO Number:	9745835
Official Number:	861360
Port of Registry:	Dampier
GRT/NRT:	5376/1612
Length:	100 metres
Breadth:	32 metres
Depth:	6.20 metres
Maximum draught:	4.6 metres (typical operating draught: 2.5 to 3.0 metres)
Deck strength:	20 tonnes/m ²
Lightship:	3076.7 tonnes
Deadweight:	10,930 tonnes
Cargo fuel oil:	423 tonnes in double bottom tanks
Cargo fresh water:	688.8 tonnes
Ballast:	8597 tonnes (maximum)
Ballast pumps:	2 x 2000m ³ /hr plus 1 x 50m ³ /hr stripping eductor
Nominal container load:	Minimum of 336 TEU @ 18 tonnes
Construction:	Steel
Class:	Lloyds Register (LR)
Anchors/Windlass:	2 x 2.28 tonne stockless / Windlass 2 x 69 kN
Mooring winches:	4 x 60kN self-tensioning hydraulic – 2 aft and 2 forward.
Mooring equipment:	2 x 60 tonne SWL single roller fairleads with cleat. 8 x 55 tonne SWL bollards. 2 x 5 rollers fairleader SWL 35 tonne / 2 x 4 rollers fairleader SWL 53 tonnes / 4 x 4 rollers fairleader SWL 20 tonne
Generators:	Main 1 x 504kw, Harbour 1 x 135kw
Fire pump:	1
Life rafts:	2 x 6 man
Cargo fuel pump:	1 x 100m ³ /hr
Towing brackets:	SMIT type forward (100 tonne SWL) and aft (140 tonne SWL)
Lashing points:	28 D Rings at SWL 245 KN; and; 460 flush sockets at SWL 250 KN

Bow ramp:	Permanent ramp 8.70m wide x 13.4m long adjustable with two 19.3 tonne portable ramp sections to 17.40 metres width. Front axle SWL 120 tonnes.
Stern ramp:	Up to 5 portable 19.3 tonne ramp sections 4.35m wide x 13.4m long. Front axle SWL 120 tonnes.
Other tanks:	Slop tank/bilge tank and dirty oil tank
Other notes:	The barge is fitted with fire-fighting equipment including extinguishers, hydrants, hoses and nozzles. Safety equipment includes lifebuoys and lifejackets, two emergency escape sets (engine room). Access is via the ramps when rigged, pilot ladder (carried on board) and recessed rungs in the hull.

