

**McCONNELL
DOWELL**

CREATIVE CONSTRUCTION™

MCD-914 Jack-Up Barge



**Elevate
Your Marine
Construction Potential**

Introducing the MCD-914, McConnell Dowell's cutting-edge, self-elevating marine construction platform. Purpose-built to deliver unmatched productivity in jetty and nearshore facility development.

Designed by GustoMSC and added to our fleet in 2022, the MCD-914 operates in waters up to 30 metres deep, featuring a powerful 300-tonne pedestal crane and an automated jacking system for fast, stable elevation.

Supported by its own dedicated transport barge, the MCD-924, this platform enables rapid, cost-efficient deployment with a skilled crew of 24 — giving your project a decisive edge in capability, speed, and performance.



Specifications

Equipped with a removable helideck designed to accommodate a helicopter up to an AW139, featuring a D-Value of 16.62m and maximum take off mass (MTOM) of 7.0MT.

The deck construction incorporates an industry leading passive fire-retardant surface, using a seawater only Deck Integrated Fire Fighting System (DIFFS) - eliminating the need for foam concentrate while maintaining full compliance with marine and aviation standards. Integration of a flame detection system to support unmanned landings and take-offs, as well as a modern LED lighting system to allow 24-hour operational capability, this helideck combines cutting edge technology to allow the operational flexibility needed to complete any job safely.



Jacking System

Make	Gusto MSC
System	Positive engagement
Leg type	Tubular
Capacity (preload)	1300 ton/leg
Pontoon lifting speed	24 m/hr
Standard leg length	55 m (possible extension to 65 m)
Maximum operational water depth	30 m

Crane

Make	Favelle Favco
Type	PC 300
Lifting capacity main hoist	300 ton @ 16 meter
Lifting capacity auxiliary hoist	32 ton
Current boom length	59.6 m
Equipped with	2 x 150T x 4 fall main hoist winch
Equipped with	2 x tugger winches

Pontoon

Dimensions	46.5 X 30.3 X 4.5 m
Draft	2.4 m
Deck Load	.8T/m ²
Variable Payload capacity	886T
Classification	ABS, A1 Self-elevating Unit
Capacity fuel tank	116 m ³
Capacity fresh water tank	2 x 55 m ³
Capacity sewage tank	15 m ³
Dirty Oil tank	.5 m ³
Flag State	Dampier / Australia

Power Sources

Main generators	2 x 450 kVA
Auxiliary generator	1 x 120 kVA

Piling Testing Facilities

Maximum pile diameter	3000 mm
Maximum compression test	12.5 MN
Maximum tension test	9 MN

Accommodation

Main deck: deck store, first aid room, machinery rooms.

Tween deck: mess hall (24) c/w kitchenete, wash/change room, toilet.

Upper deck: twin cabin, three offices, meeting room, toilet, janitor stores.

Vessel to Vessel transfer stairway.

Mooring System

Number of winches	4
Pulling force	25 ton
Holding force	60 ton
Wire diameter	32 mm
Drum capacity	500 m
Anchors	4 x 3T Delta Flipper

Foundation Equipment

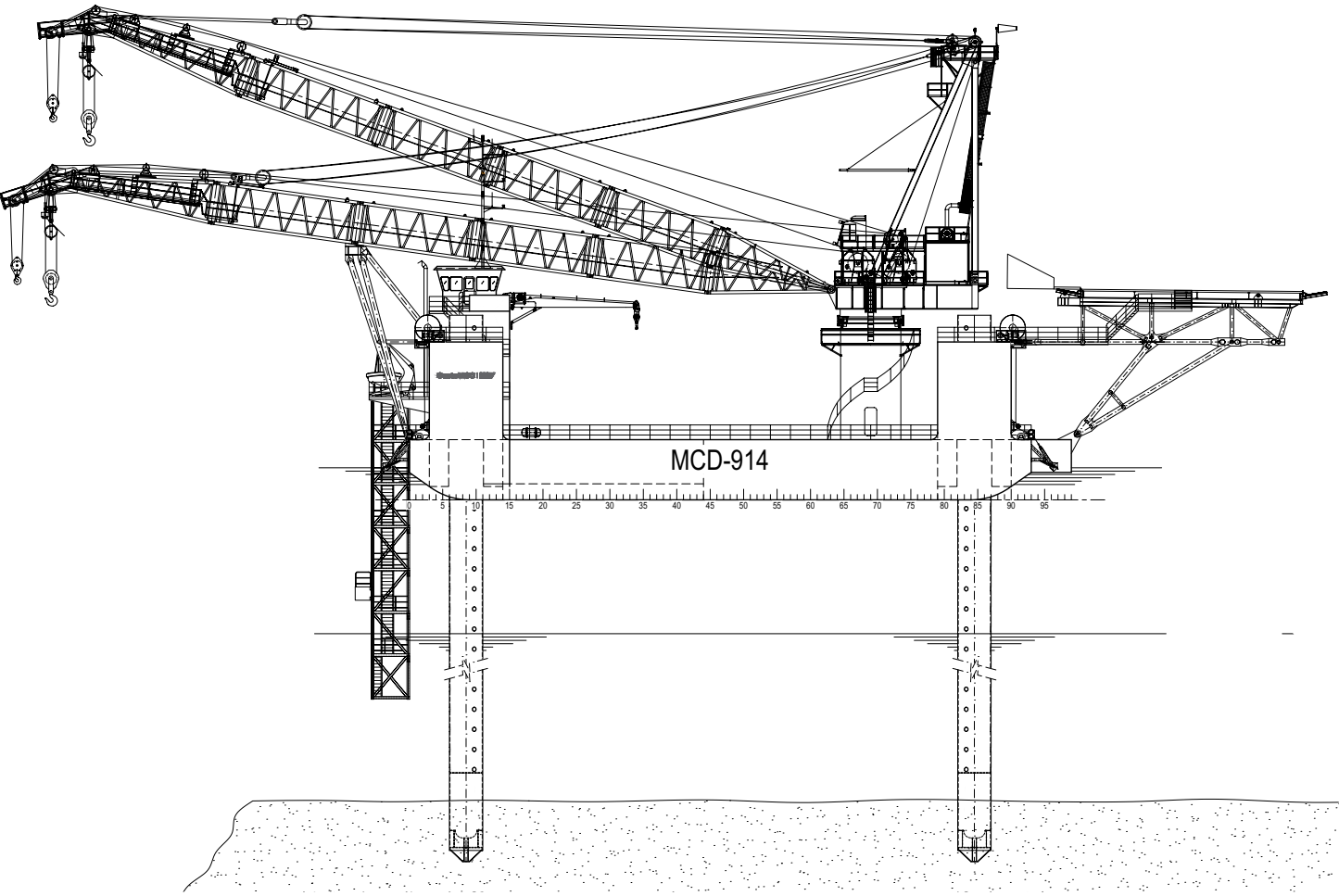
A wide range of piling and drilling equipment can be made available for the installation of piles. The MCD 914 comes equipped with 2 hydraulic pile gates, suitable for use with raked piles up to 1500mm diameter and vertical piles up to 2500mm diameter.

The following equipment has been used previously:

- Impact hammers up to 500 kNm
- Vibration hammers up to 115 kgm
- Drill rigs up to 20 tonmeter

Specifications

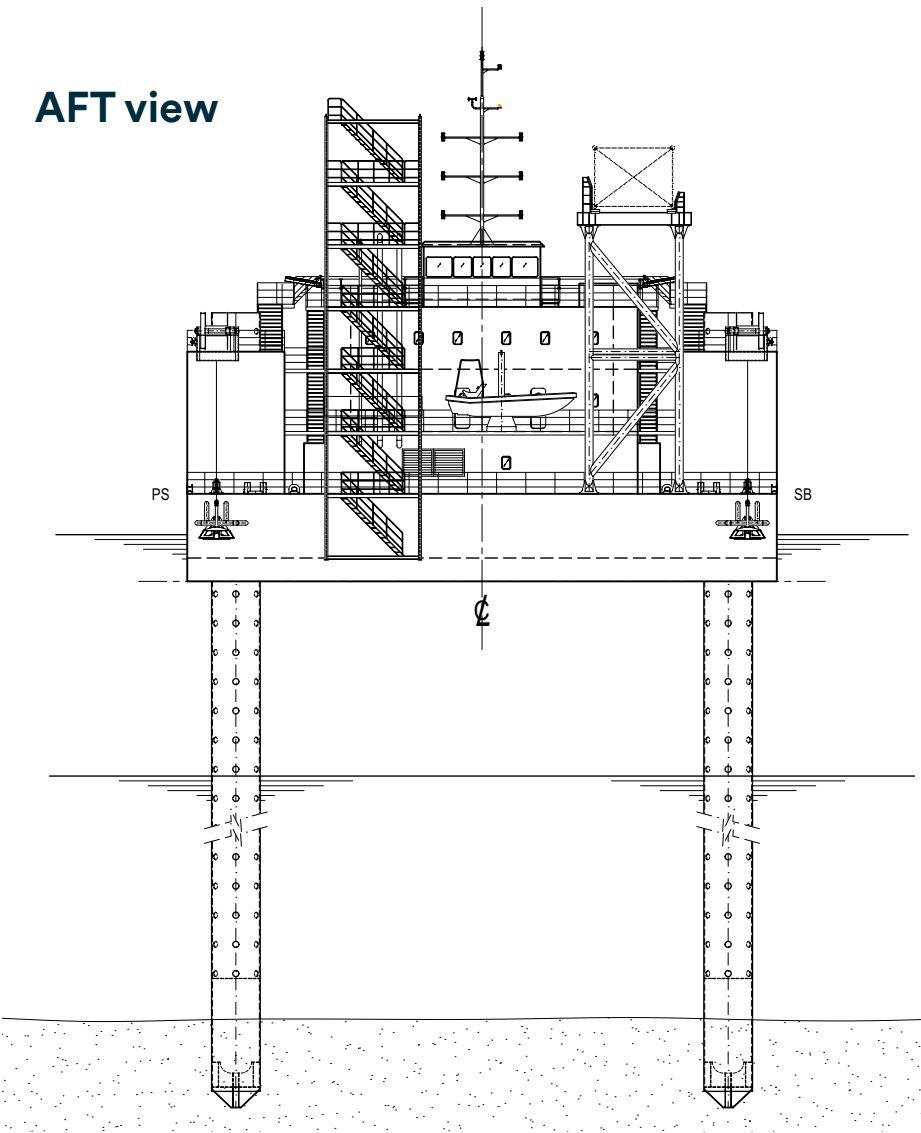
Side view



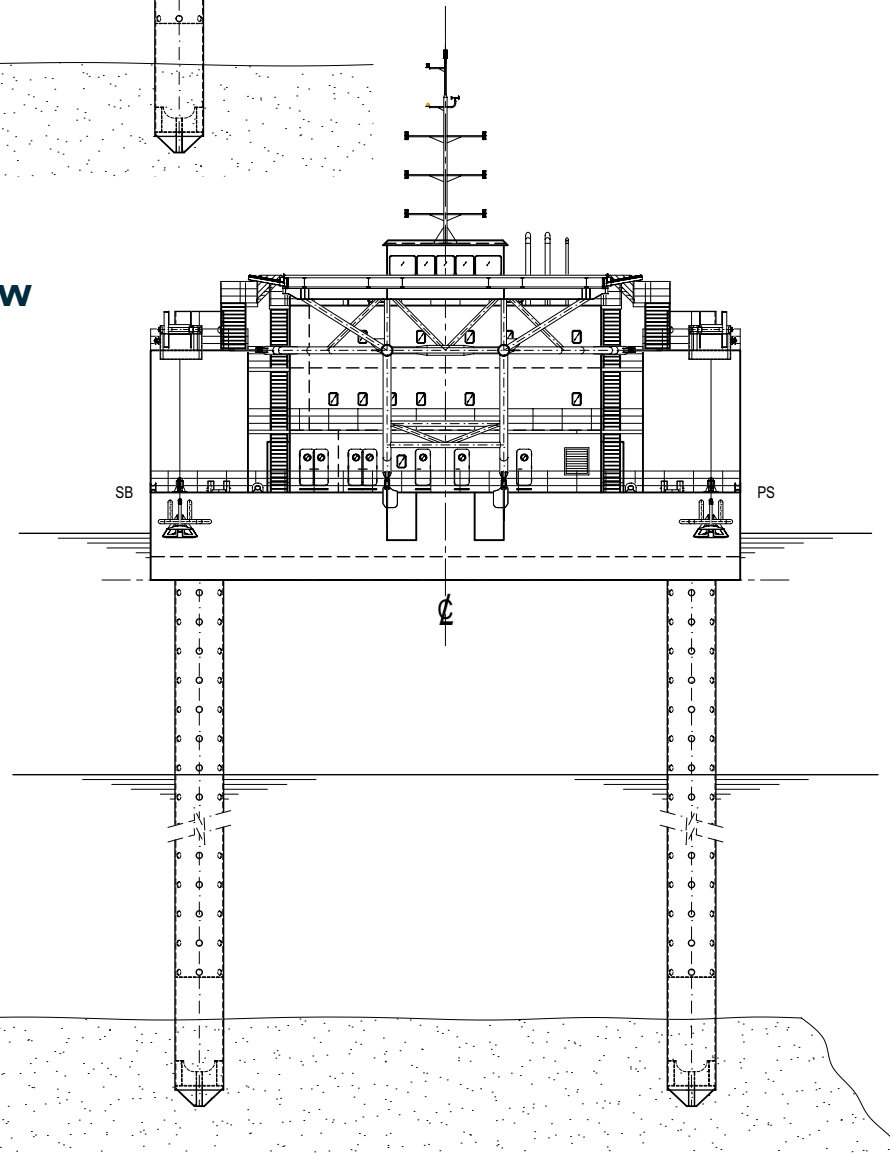
Main Dimensions

- Length 46.5 m
- Width 30.3 m
- Depth 4.5 m
- Leg length 55 m (possible extension to 65 m)

AFT view

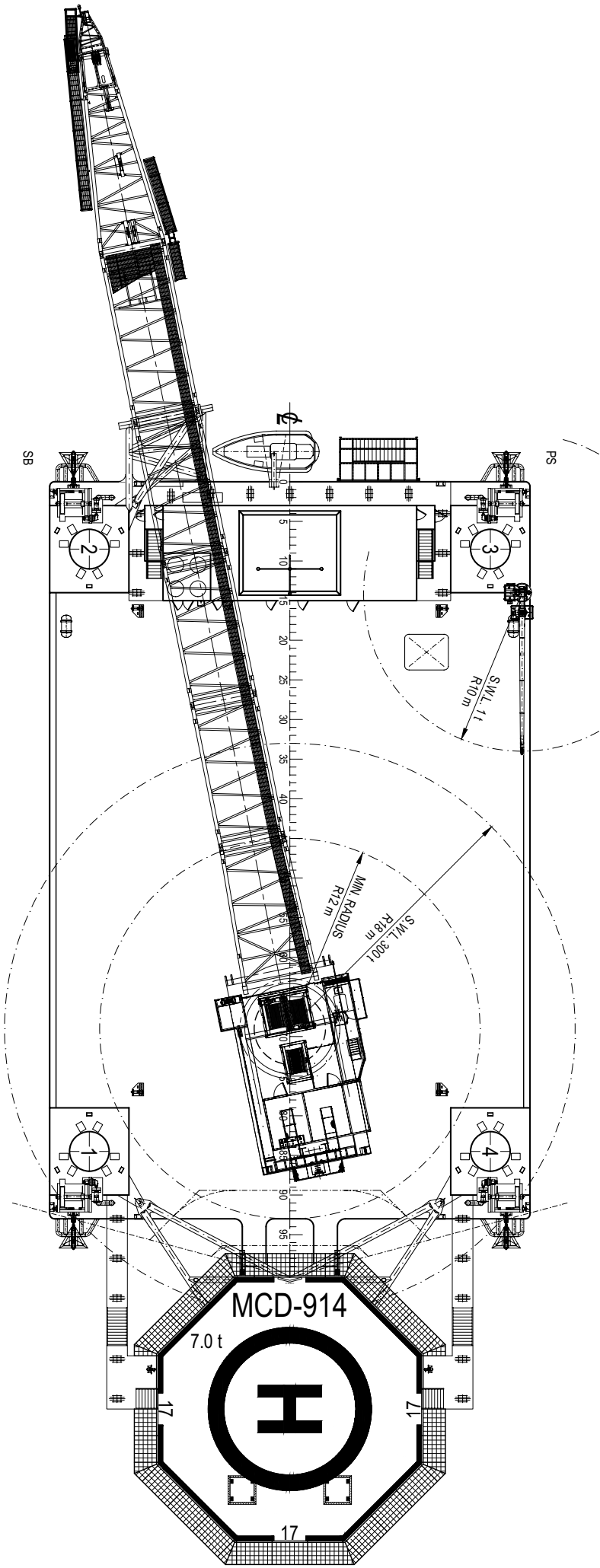


Front view

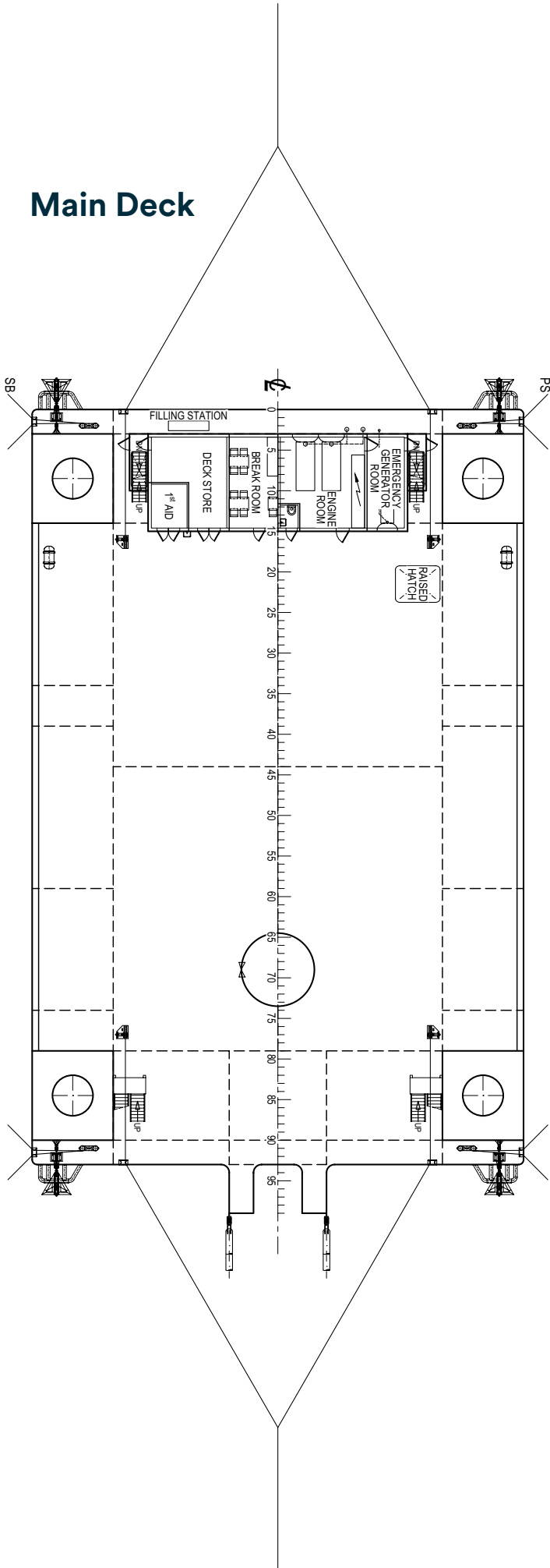


Specifications

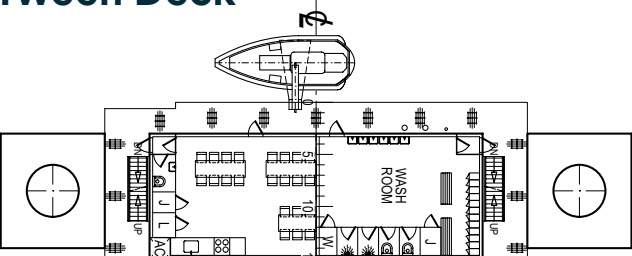
Top view



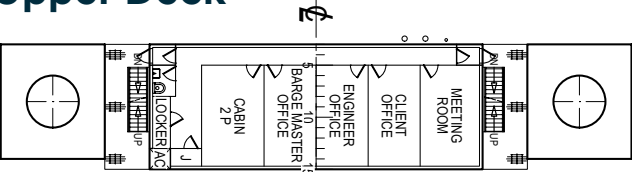
Main Deck



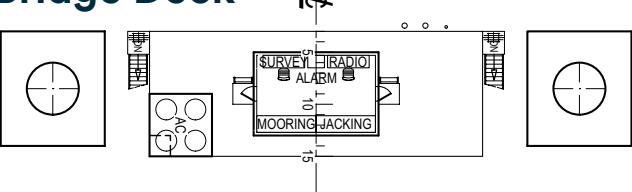
Tween Deck



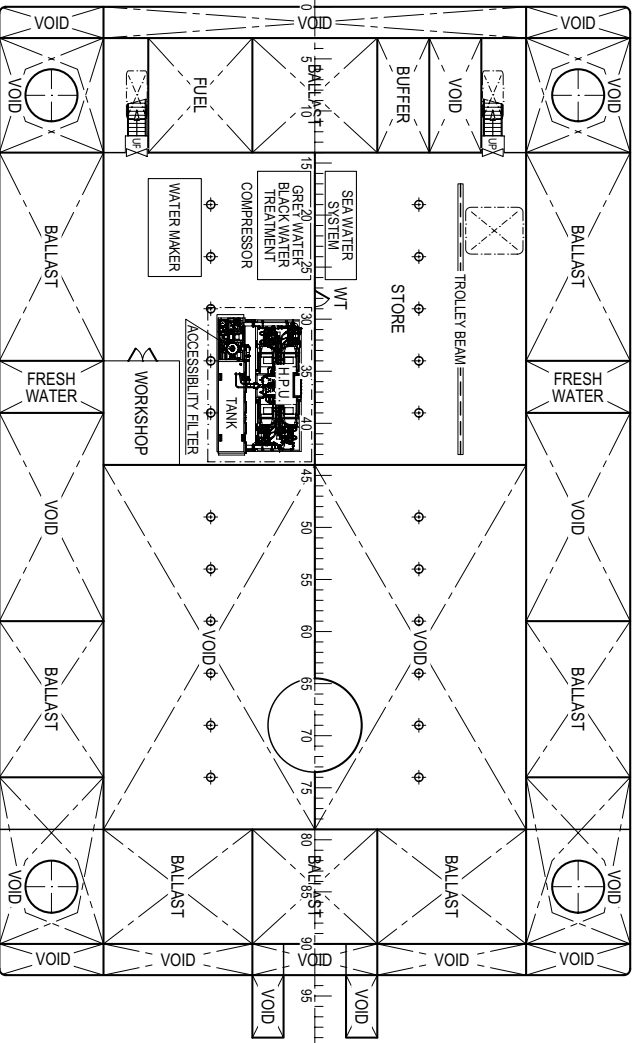
Upper Deck



Bridge Deck



Below Main Deck



Specifications

CRANE MODEL PC300 S/No. 1843 WITH 59.6m BOOM													ON JACK-UP-BARGE NAMED MCD 914																
Jack up (fixed platform load chart - Each winch is not to exceed 150 tonnes													main hoist 2 x 4 falls) or the stated SWL, whichever is lesser																
Safe working load (SWL) in Tonnes - the main hoist is not rated for personnel lifting																												API recommended min hook speed at supply boat elevation	
Radius (m)		12.0	14.0	16.0	18.0	20.0	22.0	24.0	26.0	28.0	30.0	32.0		34.0	36.0	38.0	40.0	42.0	44.0	46.0	48.0	50.0	52.0	54.0	56.0	58.0	60.0		
Boom Angle (Degrees)		82.2°	80.3°	78.3°	76.3°	74.3°	72.3°	70.3°	68.2°	66.1°	64.0°	61.8°		59.6°	57.3°	54.9°	52.5°	50.0°	47.4°	44.7°	41.9°	38.8°	35.6°	32.0°	28.1°	23.5°	17.8°		
Platform DF=1.33	Onboard	300.0	300.0	300.0	291.5	281.6	270.0	260.7	236.7	216.1	198.3	182.7		168.9	156.7	145.7	135.2	125.7	117.0	109.2	102.0	95.3	89.3	83.6	78.4	73.6	69.2		
Significant wave height 0.6 m & max wind speed 20 m/s	Offboard	280.0	280.0	280.0	276.0	270.0	253.0	237.3	217.1	199.6	184.3	170.7		158.6	147.7	137.9	129.1	121.0	113.7	107.0	100.8	95.1	89.0	83.5	78.3	73.4	68.9	0.167 m/s	
Significant wave height 1.0 m & max wind speed 20 m/s	Offboard	262.3	261.9	260.9	259.5	254.3	222.8	212.7	193.7	177.3	163.0	150.5		139.4	129.5	120.7	112.8	105.6	99.1	93.3	87.8	83.0	78.4	74.3	70.5	66.9	63.8	0.20 m/s	
Significant wave height 1.5 m & max wind speed 20 m/s	Offboard	216.0	216.0	216.0	213.0	207.0	198.6	187.6	171.0	155.0	141.4	130.0		120.4	111.8	104.2	97.4	91.2	85.6	80.6	75.8	71.7	67.7	64.1	60.9	57.8	55.1	0.25 m/s	
Significant wave height 2.0 m & max wind speed 20 m/s	Offboard	169.7	169.7	169.7	169.7	169.7	161.8	158.7	147.2	134.4	123.3	113.5		104.9	97.2	90.4	84.4	78.9	74.0	69.6	65.5	61.9	58.5	55.5	52.7	50.1	47.8	0.30 m/s	

JACKED UP (FIXED PLATFORM) LOAD CHART - FLY HOIST 2 FALL																											
Safe working load (SWL) in Tonnes - the main hoist is not rated for personnel lifting																											API recommended min hook speed at supply boat elevation
Radius (m)	13.3	15.3	17.4	19.5	21.6	23.6	25.7	27.8	29.9	31.9	34		36.1	38.2	40.2	42.3	44.3	46.4	48.5	50.5	52.6	54.6	56.7	58.7	60.7	62.7	
Boom Angle (Degrees)	82.2°	80.3°	78.3°	76.3°	74.3°	72.3°	70.3°	68.2°	66.1°	64.0°	61.8°		59.6°	57.3°	54.9°	52.5°	50.0°	47.4°	44.7°	41.9°	38.8°	35.6°	32.0°	28.1°	23.5°	17.8°	
Platform DF=1.3	Onboard	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0		32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	28.0	21.1	14.5	
	Personnel	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5		10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	9.2	7.0	4.8	
Significant wave height 0.6 m & max wind speed 20 m/s	Offboard	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0		32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	27.8	21.3	14.0	0.167 m/s
	Personnel	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5		10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	9.2	7.0	4.6	
Significant wave height 1.0 m & max wind speed 20 m/s	Offboard	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0		32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	25.8	18.5	11.8	0.20 m/s
	Personnel	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5		10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	8.5	6.1	3.8	
Significant wave height 1.5 m & max wind speed 20 m/s	Offboard	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0		32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	28.3	22.5	15.7	9.6	0.25 m/s
	Personnel	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5		10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	7.3	5.2	3.1	
Significant wave height 2.0 m & max wind speed 20 m/s	Offboard	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0		32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	32.0	24.5	18.5	12.8	7.4	0.30 m/s
	Personnel	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5		10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	8.0	6.1	4.2	2.4	

This load chart is based on the general method of API 2C 6th ED with Max Heel Angle 2.0° and Max Trim Angle 2.0° and reeved in accordance with DRG No. A3-5000.421 in the crane manual seismic loads have not been included in the load chart.
Ice or snow loading have not been included in the load chart.

Loads depicted as shown do not comply with the minimum API hoisting speed

For more information about McConnell Dowell and our other specialist marine plant please contact us:



+61 3 9816 2400



mcdgroup@mcdgroup.com



[/mcconnell-dowell](https://www.linkedin.com/company/mcconnell-dowell)



[@McConnellDowellVideos](https://www.youtube.com/channel/UCMcConnellDowellVideos)



mcconnelldowell.com/marine-plant



CREATIVE CONSTRUCTION™

mcconnelldowell.com