McCONNELL DOWELL
CREATIVE CONSTRUCTION™

Jack-Up Barge MCD 914

Profile and Data Sheet

March 2024

McCONNELL DOWELL
CREATIVE CONSTRUCTION™

MCD 914 Jack-Up Barge

The MCD 914 is a multi-purpose, self-elevating, marine construction platform. Designed by Gusto MSC, this innovative piece of equipment sets the benchmark for productivity in the development of jetties and nearshore marine facilities. With the ability to operate in waters up to 30 metres deep, the incorporated 300-tonne pedestal crane and its dedicated transport barge; the MCD 914 provides an extraordinary advantage to any suitable project.

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
Maximum operational water depth	30 m

Pontoon

Dimensions	46.5 X 30.3 X 4.5 m
Draft	2.4 m
Deck Load	8T/m^2
Jacking Payload capacity	750T
Classification	ABS, A1 Self-elevating Unit
Capacity fuel tank	116 m^3
Capacity fresh water tank	2 x 55 m^3
Capacity sewage tank	15m^3
Dirty Oil tank	5m^3
Flag State	Dampier / Australia

Crane

Make	Favelle Favco
Type	PC 300
Lifting capacity main hoist	300 ton @ 16 meter
Lifting capacity auxiliary hoist	32 ton
Current boom length	59.6m

Equipped with 2 x 150T x 4 fall main hoist winch
Equipped with 2 x tugger winches

Accommodation

Main deck: deck store, first aid room, machinery rooms
Tween deck: mess hall (24) c/w kitchenette, wash/change room, toilet.
Upper deck: twin cabin, three offices, meeting room, toilet, janitor stores.
Vessel to Vessel transfer stairway

McCONNELL DOWELL

CREATIVE CONSTRUCTION™

Power sources

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

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

Piling testing facilities

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

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 piles up to 1500mm 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

CRANE MODEL PC300 S/No. 1843 WITH 59.6m BOOM ON JACK-UP-BARGE

JACKED UP (FIXED PLATFORM) LOAD CHART - MAIN HOIST 2 x 4 FALLS

EACH WINCH IS NOT TO EXCEED 150 TONNES OR THE STATED SWL, WHICHEVER IS LESSER.

SAFE WORKING LOAD (SWL) IN TONNES - THE MAIN HOIST IS NOT RATED FOR PERSONNEL LIFTING

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	API RECOMMENDED MIN HOOK SPEED AT SUPPLY BOAT ELEVATION
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 20m/s	OFFBOARD	280.0	280.0	280.0	276.0	270.0	253.0	237.3	217.1	199.6	184.3	170.7	158.5	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 20m/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 2.0 m & MAX WIND SPEED 20m/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 FLY HOIST IS RATED FOR PERSONNEL LIFTING

RADIUS (m)		13.3	15.3	17.4	19.5	21.6	23.6	25.7	27.8	29.9	31.9	34.0	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	API RECOMMENDED MIN HOOK SPEED AT SUPPLY BOAT ELEVATION
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	32.0	32.0	28.0	21.1	14.5	
	PERSONNEL	8																									
SIGNIFICANT WAVE HEIGHT 0.6 m & MAX WIND SPEED 20m/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	32.0	27.8	21.3	14.0	0.478 m/s
	PERSONNEL	6																									
SIGNIFICANT WAVE HEIGHT 1.0 m & MAX WIND SPEED 20m/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	32.0	25.8	18.5	11.8	0.478 m/s
	PERSONNEL	6																									
SIGNIFICANT WAVE HEIGHT 2.0 m & MAX WIND SPEED 20m/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	24.5	18.5	12.8	7.4	0.478 m/s
	PERSONNEL	6																									

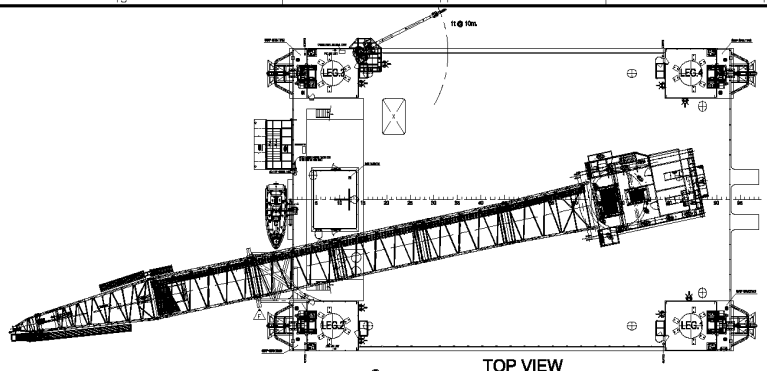
THIS LOAD CHART IS BASED ON THE GENERAL METHOD OF API 2C 6th ED WITH MAX HEEL ANGLE 2.0° AND MAX TRIM ANGLE 2.0° AND REEVED IN ACCORDANCE WITH DRG No. A3-5000.421 IN THE CRANE MANUAL. SEISMIC LOADS HAVE NOT BEEN INCLUDED IN THE LOAD CHART.

ICE OR SNOW LOADING HAVE NOT BEEN INCLUDED IN THE LOAD CHART.

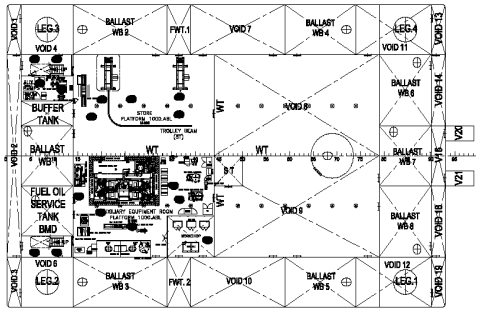
THE CRANE IS DESIGNED AND MANUFACTURED BY FAVELLE FAVCO CRANES.

LOADS DEPICTED AS SHOWN ▨ DO NOT COMPLY WITH THE MINIMUM API HOISTING SPEED.

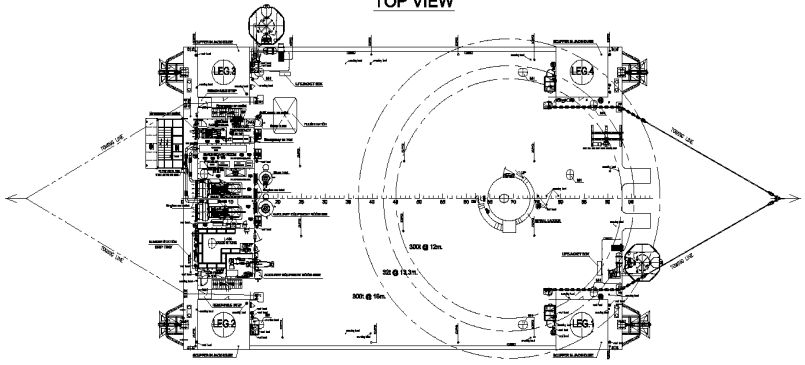
A3-2170.1083 REV A



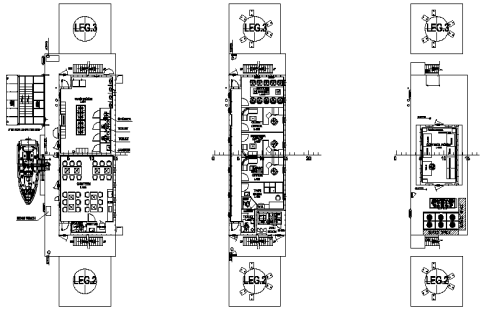
TOP VIEW



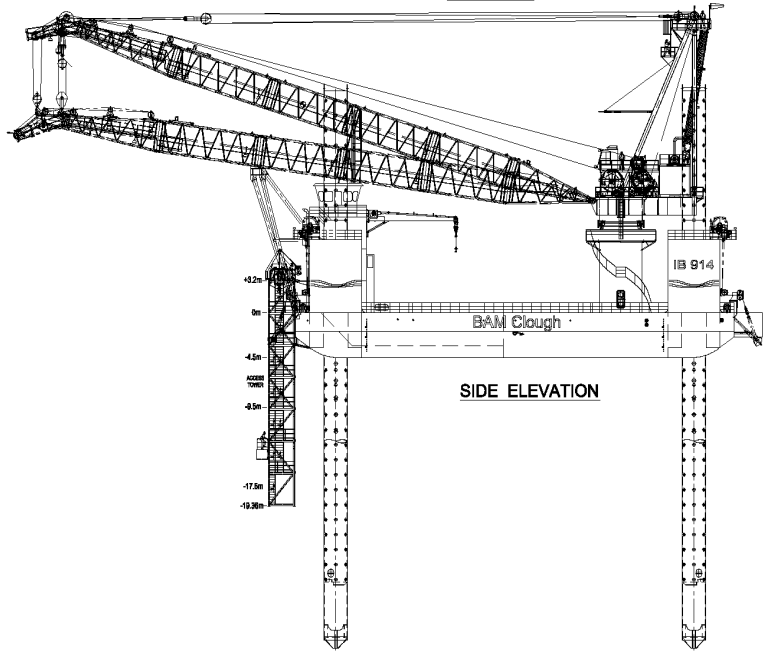
BELOW MAIN DECK



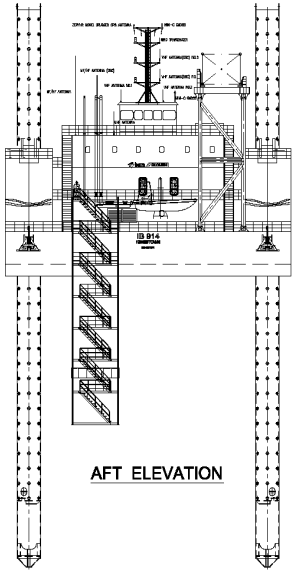
MAINDECK



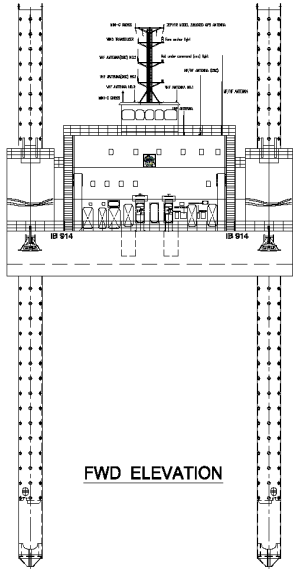
TWEEN DECK | UPPER DECK | BRIDGE DECK



SIDE ELEVATION



AFT ELEVATION



FWD ELEVATION

MAIN DIMENSIONS

LENGTH	46.5 m.
WIDTH	30.3 m.
DEPTH	4.5 m.
LEG LENGTH	55.0 m.

NOTES:

NO	DESCRIPTIONS & NOTES	BY	DATE

LIST OF ALTERATIONS

ITEM	DWG NO	DRAWING NAME OR DOCUMENTS TITLE

LIST OF REFERENCED DRAWINGS AND DOCUMENTS

DATE	REV	DESCRIPTION	DWN	CHKD	APPD
2013/07/15	E	AS BUILD	ALL	LTL	GX
2013/07/11	D	AS BUILD	ALL	LTL	GX
2013/06/03	C	AS BUILD	ALL	LTL	GX
2012/12/10	B	ISSUE FOR CONSTRUCTION	ALL	LTL	GX
2012/11/20	A	ISSUE FOR APPROVAL	ALL	LTL	GX

BUILDER	COSCO (NANTONG) SHIPYARD CO. LTD	HULL NO	N499
		CLASS	ABS
OWNER	McConnell Dowell		
PROJECT	BAM CLOUGH JV IB914		
DWG TITLE:	GENERAL ARRANGEMENT	DWG No.	N499-M102-01
		SFI No.	N/A
		SCALE	1:250
		SHEET	1/1
		STATUS	AS BUILD

COSCO SHIPYARD GROUP CO.,LTD
No. 1 Zhongyuan Road Nantong, Jiangsu 226005, China
Tel:+86 21 5866 0111 Fax:+86 21 5866 8007 Email:offshore@cosco-shipyard.com

CLASS APP. DATE: | OWNER APP. DATE: | A0 841x1189mm

OWNER	1
CLASS	-
HULL	-
MACH	-
PIPING	-
OUTF'G	-
HVAC	-
E&I	-
SHOP	-
PJM	1
QA/QC	-
HSE	-
TC-NT	-
TD-NT	-
Total	2