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CREATIVE CONSTRUCTION™



# Jack-Up Barge Santa Fe

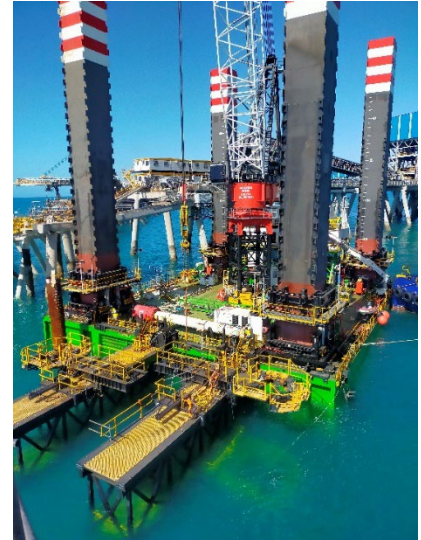
## Profile and Data Sheet

March 2024





## Santa Fe Jack-Up Barge



The Santa Fe is a multi-purpose, self-elevating, marine construction platform. Designed by Gusto MSC, the Santa Fe provides flexibility for the development of nearshore marine infrastructure. With the flexibility to operate with a crawler crane or tower crane, the integrated helipad and the availability of 12M leg extensions; the Santa Fe can be customised to suit your needs.

### Jacking system

Make	IHC Gusto Engineering
System	Positive engagement
Leg type	Square
Capacity (preload)	1000 ton/leg
Pontoon lifting speed	12 m/hr
Standard leg length	49 m
Maximum operational water depth	30-45 m

### Pontoon

Dimensions	35.0 X 30.3 X 4.1 m
Draft	3.1 m
Jacking Payload capacity	680t with M2480D
Classification	B.V, Offshore service unit
Capacity fuel tank	26 m <sup>3</sup>
Capacity fresh water tank	14 m <sup>3</sup>
Capacity sewage tank	1.5m <sup>3</sup>
Flag State	Dampier / Australia

### Crane Options

#### Tower Crane

Model	Favelle Favco M2480D
Previous capacity main hoist	132 ton @ 20 meter
Previous boom length	64.8m

#### Crawler Crane

Design crane	Kobelco SL6000
Max. operating weight of crane	445 ton
Previous capacity main hoist	130 ton @ 16 meter
Previous boom length	54m

### Accommodation

Main deck: deck store, machinery rooms  
 Tween deck: mess room and kitchenette, jacking office, spare office, male and female toilets with showers.  
 Upper deck: two large offices, meeting room, emergency accommodation for eight personnel.  
 Vessel to Vessel transfer stairway  
 Helipad

### Power sources

Jacking generators	2 x 380V 400 kVA
Auxiliary generators	2 x 415v 100 kVA

### Foundation equipment

A wide range of piling and drilling equipment can be made available for the installation of piles. The Santa Fe 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

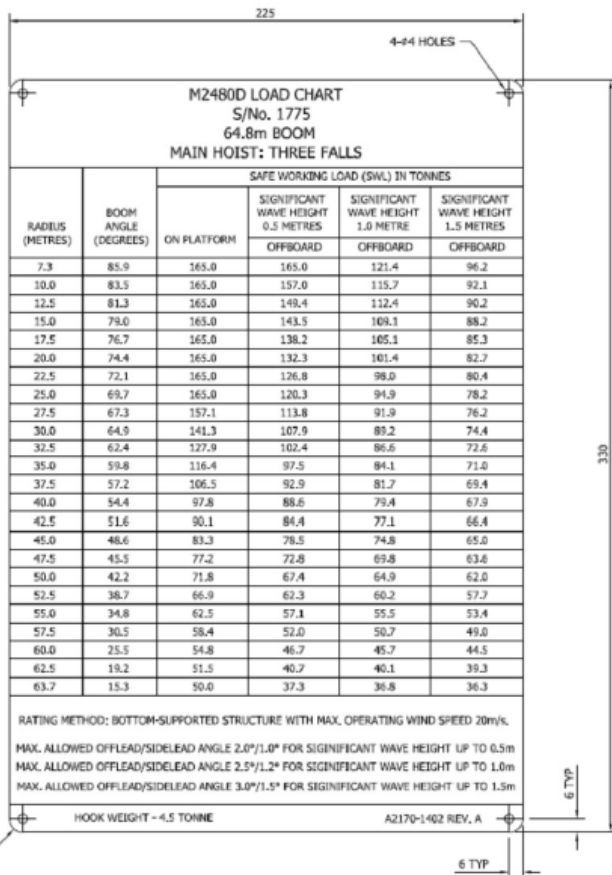
### Mooring system

Number of winches	6
Pulling force	30 ton
Holding force	60 ton
Wire diameter	34 mm
Drum capacity	300 m
Anchors	6 x 5T Delta Flipper (Not currently fitted)

### Helipad

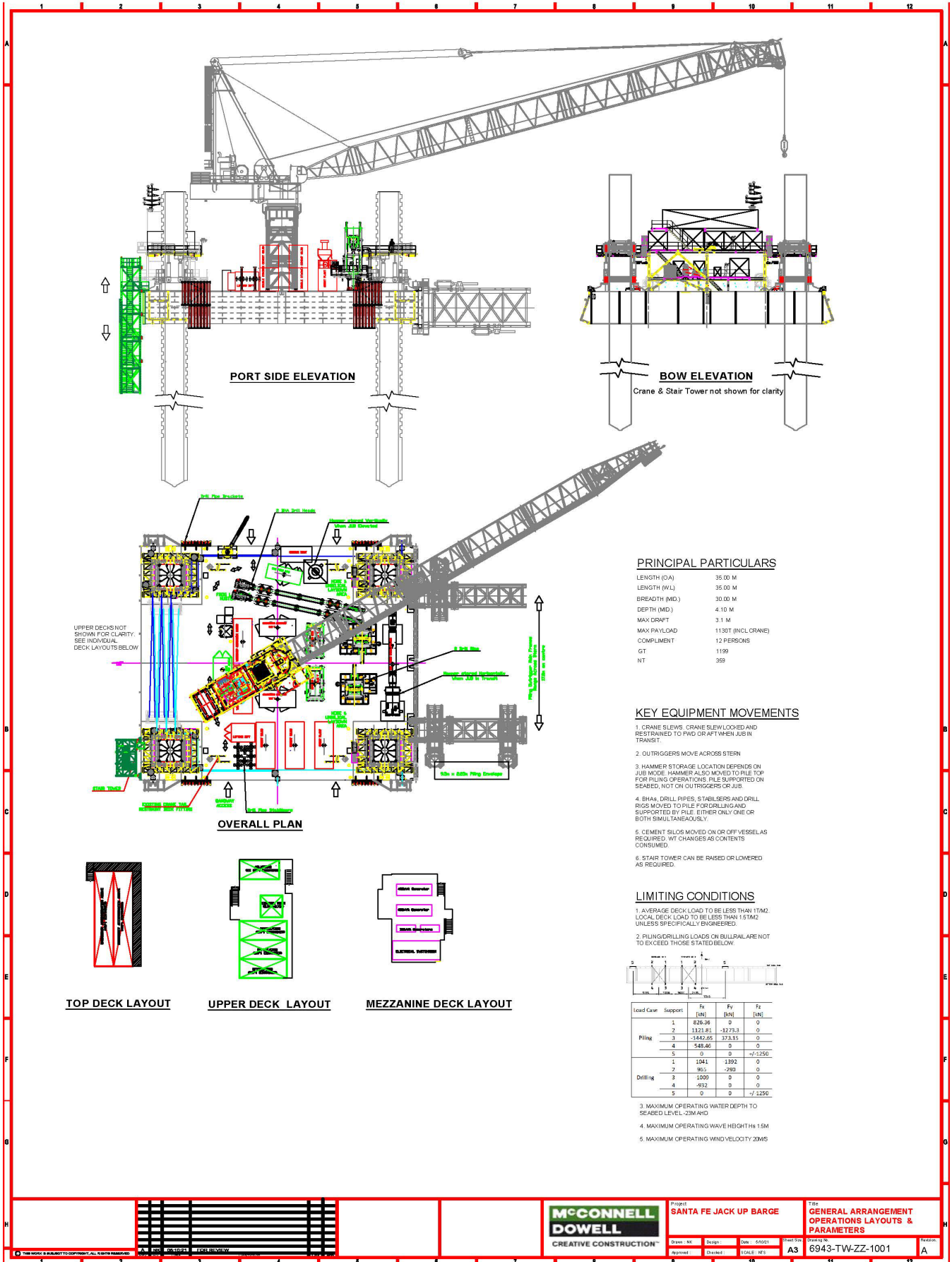
The removable helipad has been designed to comply with Cap 437. It is currently rated for a Eurocopter AS350 B3 with a MTOW of 2500kg or equivalent.

The helipad is upgradeable to suit a Eurocopter EC145 with a MTOW of 3585kg.



DETAIL ITEM 1  
REFER DXF A2170-1402-001A

Date	Description	ECN Number	Rev
<b>TOLERANCES</b>			
Machined Dimensions: Tolerances required UNO.			
≤30	>30 - ≤100	>100 - ≤300	>300 - ≤1000
±0.2	±0.3	±0.5	±0.8
Structural Components: Tolerances required UNO.			
≤1000	>1000 - ≤2000	>2000 - ≤3000	>3000 - ≤6000
±1	±2	±3	±4
<b>FAVELLE FAVCO CRANES PTY. LTD, Australia</b> A.S.B.N. 29 867 582 449 A subsidiary of FAVELLE FAVCO BERHAD A member of MUIHUBSAH ENGINEERING BHD			
<b>M2480D LOAD CHART - 64.8m BOOM - THREE FALLS</b>			
Drawn	Draft Checked	Eng Checked	Approved
DPR	JQP	JQP	JPD
Weight	First Used On S/No.	Drawing Number	Scale
-	1775	A2170-1402	1:1.5
Sheet:		1 OF 1	



PORT SIDE ELEVATION

BOW ELEVATION

Crane & Stair Tower not shown for clarity

OVERALL PLAN

TOP DECK LAYOUT

UPPER DECK LAYOUT

MEZZANINE DECK LAYOUT

**PRINCIPAL PARTICULARS**

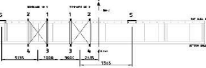
LENGTH (OA)	35.00 M
LENGTH (WL)	35.00 M
BREADTH (MD)	30.00 M
DEPTH (MD)	4.10 M
MAX DRAFT	3.1 M
MAX PAYLOAD	1130T (INCL CRANE)
COMPLIMENT	12 PERSONS
GT	1199
NT	359

**KEY EQUIPMENT MOVEMENTS**

1. CRANE SLEWS. CRANE SLEW LOCKED AND RESTRAINED TO FWD OR AFT WHEN JIB IN TRANSIT.
2. OUTRIGGERS MOVE ACROSS STERN.
3. HAMMER STORAGE LOCATION DEPENDS ON JIB MODE. HAMMER ALSO MOVED TO PILE TOP FOR PILING OPERATIONS. PILE SUPPORTED ON SEABED, NOT ON OUTRIGGERS OR JIB.
4. BHAs, DRILL PIPES, STABILISERS AND DRILL RIGS MOVED TO PILE FOR DRILLING AND SUPPORTED BY PILE. EITHER ONLY ONE OR BOTH SIMULTANEOUSLY.
5. CEMENT SILOS MOVED ON OR OFF VESSEL AS REQUIRED. Wt CHANGES AS CONTENTS CONSUMED.
6. STAIR TOWER CAN BE RAISED OR LOWERED AS REQUIRED.

**LIMITING CONDITIONS**

1. AVERAGE DECK LOAD TO BE LESS THAN 17M2. LOCAL DECK LOAD TO BE LESS THAN 15T/M2 UNLESS SPECIFICALLY ENGINEERED.
2. PILING/DRILLING LOADS ON BULLRAIL ARE NOT TO EXCEED THOSE STATED BELOW.



Lead Case	Support	Fx [kN]	Fy [kN]	Fz [kN]
Piling	1	426.96	0	0
	2	1323.81	-1279.3	0
	3	-1542.05	373.15	0
	4	-589.46	0	0
	5	0	0	-173250
Drilling	1	1041	1392	0
	2	965	-290	0
	3	1009	0	0
	4	-932	0	0
	5	0	0	-173250

3. MAXIMUM OPERATING WATER DEPTH TO SEABED LEVEL -23M AHD
4. MAXIMUM OPERATING WAVE HEIGHT Hs 1.5M
5. MAXIMUM OPERATING WIND VELOCITY 20MS