

# CJ80-X175-A

This product sheet describes the basic design of a three legged cantilever type jack-up drilling unit GustoMSC CJ80 in the X-A version.

The CJ80-X175-A is intended for use in water depths up to 175 m type rough environment.

This product sheet describes the standard unit. Modifications to suit the client's requirements can be considered.

## Platform particulars

### Hull

Length hull	101.0 m
Breadth hull	110.0 m
Leg centres	80.0 m
Depth hull	13.0 m
Design draft	8.5 m

### Fixation systems

Number	18
Make	GustoMSC
Type	12,000
Drive	AC electric

### Jacking systems

Number	3 x 24 pinions
Make	GustoMSC
Size	455 t per pinion effective jacking
Jacking speed (hull lifting)	0.45 m/min
Jacking speed (leg handling)	0.68 m/min
Drive	AC electric, variable speed

### Legs

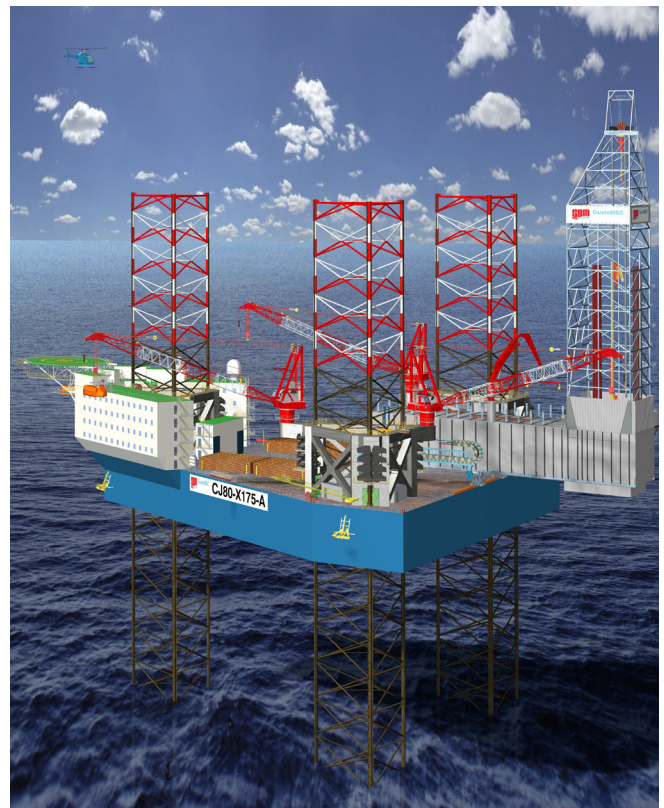
Number	3
Type	Triangular open truss X-braced
Size	20 m chord centre to centre
Overall length	232 m
Footing reaction	21,000 tf
Footing area	420 m <sup>2</sup>

### Accommodation

Fully air conditioned for 150 men in single cabins, utilities for working in 2 shifts

### Storage capacities

Fuel oil	1,900 m <sup>3</sup>
Potable water	750 m <sup>3</sup>
Drill water	3,300 m <sup>3</sup>
Preload	37,500 m <sup>3</sup>
Raw water	500 m <sup>3</sup>



Liquid mud	2 x 900 m <sup>3</sup>
Bulk mud/cement	560 m <sup>3</sup>
Brine	750 m <sup>3</sup>
Base oil	750 m <sup>3</sup>
Deck drain	500 m <sup>3</sup>
Sacks	5,000
Main deck pipe rack	600 t

### Environmental conditions

For steel: design temperature	-20°C
For AC and ventilation systems:	
• max ambient temperature	+35°C
• min ambient temperature	-20°C

### Classification, regulations

DNV/ ABS  
Self-elevating drilling unit  
IMO MODU code, latest edition  
SNAME T&R 5-5A, August 2008: RP

### Power plant

Main power	4 x 2,600 KW generator sets 2 x 1,550 KW generator sets
------------	--

### The Netherlands

Karel Doormanweg 66, 3115 JD, Schiedam  
P.O. Box 687, 3100 AR Schiedam

Telephone +31 (0)10 232 0800  
Telefax +31 (0)10 232 0801

[www.GustoMSC.com](http://www.GustoMSC.com)

**GustoMSC**

## Drilling equipment

Drilling depth	30,000 ft
Mud pumps	4 x 2,200 HP
Rotary table	49.5 inch
Drawworks	6,000 HP
Derrick	210 ft, 45 x 50 ft, 2,000 kips hook load
BOP's	18 3/4 inch, 15,000 psi
Diverter	49.5 inch
Kill and choke manifold	15,000 psi
Top drive	2 x 1,150 HP

## Cantilever

Type	GustoMSC XY
Maximum reach:	
Longitudinal	36.5 m
Transversal	2 x 12.5 m
Maximum combined load:	
Drilling	2,250 t
Survival	680 t
Pipe rack	750 t

## Deck equipment

Mooring winches	4 single drum winches 100 t pull 255 t holding 1,200 m of 63 mm wire 10 t HHP anchors
-----------------	---

## Cranes

3 electro-hydraulic 59 m boom 80 t at 20 m 17.2 t at 59 m
--

## Helideck

Helicopter	S61N or EH101
Dimensions	28.5 m diameter

Data presented in this product sheet is for information only and subject to change without notice.

## Design conditions CJ80-X175-A

### Elevated conditions

The unit is designed to withstand the external loadings in the elevated position according to the following typical combinations of conditions.

### Survival conditions

	North Sea, all year
leg length	232.0 m
max water depth	175.0 m
air gap	23.0 m
wave height/ period	29.0 m/ 16.0 s
surface current	1.0 m/s
wind velocity (1 min sustained)	49.0 m/s
leg penetration	3 m
variable load	4,500 t
combined load	680 tf
* at reach aft form stern	30.5 m
* at either side of CL	12.5 m
seabed sand with phi	35 deg

### Operational (drilling) conditions

	North Sea, all year
leg length	232.0 m
max water depth	175.0 m
air gap	23.0 m
wave height/ period	25.0 m/ 15.0 s
surface current	1.0 m/s
wind velocity (1 min sustained)	36.0 m/s
leg penetration	3 m
variable load	4,500 t
combined load	1,500 tf
* at reach aft form stern	30.5 m
* at either side of CL	12.5 m
seabed sand with phi	35 deg

### Towing conditions

The unit is designed to withstand the external loadings in the towing conditions according to the following main criteria:

	location move
variable load	6,000 t
displacement (leg footings empty) approx	45,000 t
draft hull approx	7.0 m
max roll or pitch motion each side	10 deg
full cycle period	16 s