GustoMSC 800 t Offshore Crane
"WRAPPED AROUND THE LEG"

Make	GustoMSC
Crane model	GLC-800-ED
Drive system	Electric
Type	A-Frame & Around Leg

The GLC series - a GustoMSC product

Description

The GustoMSC GLC series is a range of heavy lift offshore cranes that can be positioned on top of a jack-house of a jack-up platform/vessel/barge. These cranes can revolve 360º unrestricted around the jack-up leg, creating numerous operational advantages.
"WRAPPED AROUND THE LEG", the GLC-800-ED is capable of lifting its maximum load of 800 tons at a minimum radius of 24 m with a dynamic factor of 1.1.
This Leg Crane is an electric driven, rope luffing, pedestal mounted, A-frame crane revolving on a bogie roller system. The GLC-800-ED, with a limited tail swing, combines a high capacity & high outreach with an extreme short minimum radius and makes it ideally suited for installation of wind turbine parts and/or other heavy components.

General Specifications

Capacities

• Main hoist	800 t @ 24 m
Main hoist in "split-mode"	480 t @ 36 m
Minimum outreach	15 – 18 m
Hoisting height (above heel point)	77 m
• Auxiliary hoist	50 t @ 91 m
Minimum outreach	18.3 m
Hoisting height (above heel point)	85.5 m
Man riding capacity	3 t
• Tugger winches	2 x 5 t

Dynamic Amplifying Factors

• Main hoist	DAF 1.1
• Auxiliary hoist	DAF 1.3

Operational wind speed	16 m/s
Max. static platform inclination	1º
Slewing speed	0.3 rpm
Slewing range	n x 360º
Boom hoist time	approx. 12 min

Main dimensions & weights

Tail swing	approx. 9.5 m
Crane weight	approx. 1,030 t

Power supply

Main power supply to crane	690 VAC, 60 Hz
Total crane power consumption	1,600 kW

Rules & Regulations

These cranes will be built, equipped and tested to obtain Class certificate (such as ABS, BV, DNV, GL, LRS, etc.).
For the crane's main mechanical components as well as for the total crane, a Class of Utilization, a Class of Loading and a Group Classification are determined according to the FEM rules for the design of hoisting appliances.

Transit / Survival condition

WTI Jack-up crane vessels are classed "worldwide unrestricted service" and transit conditions are defined as long distance travel. Based on the DNV rule the maximum accelerations are included in the design of the crane.

Crane lay out

The crane consists of a fixed part (pedestal) and revolving parts mounted to the slewing platform. The pedestal is part of the Jack-house, an adaptor piece, a cylindrical tub and a tub collar, on which the slewing rails are mounted.
On top of the tub a typical GustoMSC bogie wheel system provides unrestricted continuous slewing of the crane. This robust system is applied on many GustoMSC offshore cranes, like the Balder, Hermod and DB101.

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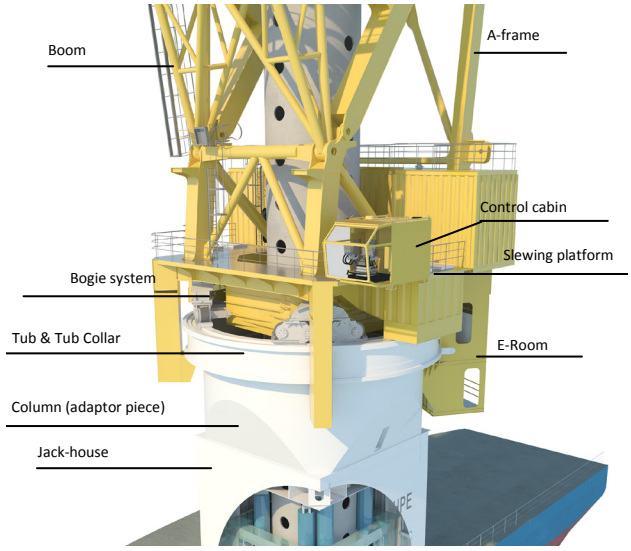
The main hoist block, with a two-prong hook, is 'splitable' and can be used in two configurations; in the full (800 t) mode or in the split (480 t) mode. For this operation the wire rope running remains intact (no re-reeving required).
Two constant tension load tugger winches, to control the main load, are installed on the crane slewing platform and are operated from the control cabin.
The operator control cabin, air-conditioned/heated, is placed on the slewing platform to ensure clear view on the load and working area. Controllers and instrumentation are ergonomically placed within the crane driver's reach and view. All driver controls can electronically be monitored via a TFT-screen and the hoist winch drums and load can be viewed by means of the CCTV system.

Electrical & Control system

The electrical & control installation are suitable for a humid, salt laden atmosphere with vibrations and accelerations normal to a marine environment.
The control system is a PLC based system with remote I/O's, with a redundant LAN Ethernet able to connect to the vessel management system for monitoring.
The primary electrical power is supplied from the vessel through the crane's slip-ring assembly. The electrical slip ring system provides the main power, auxiliary power, low voltage power and control system interface signals, between the vessel and the crane slewing platform.

Safety equipment

The crane is equipped with the latest safety equipment such as overload protection, limit switches, wind speed meter with indicator and alarm, slewing alarm signal device, emergency stop push buttons, slack rope detection, active boom stopper, fire extinguishers and fire detectors, CCTV monitors.

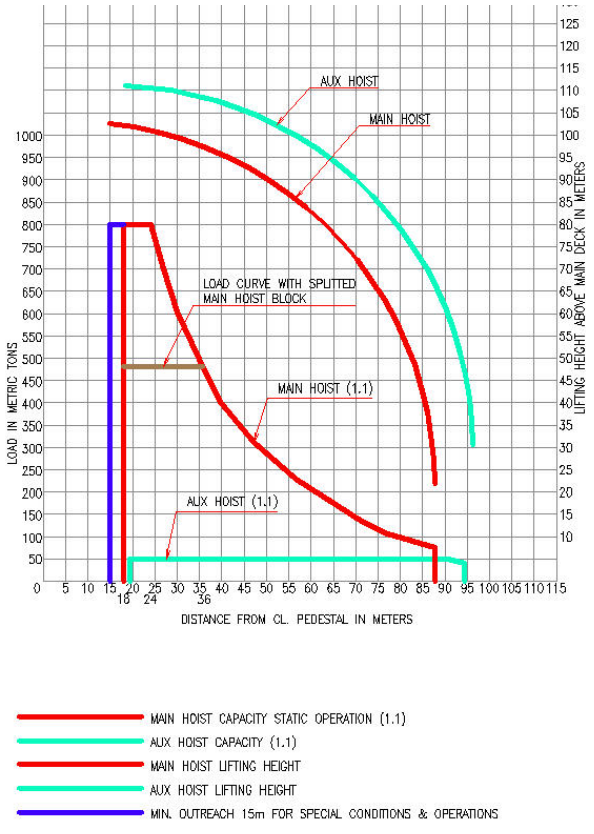


Track record

GustoMSC has a substantial reference list in special heavy lift offshore cranes, ranging in capacities from
500 tons to 5,000 tons. These cranes have been performing reliably for more than 40 years. The market segment, in which GustoMSC is active, focuses on tailor-made designs for specific offshore applications.
The GLC-800-ED is engineered to meet the specific requirements for the job

The slewing platform and A-Frame are designed to provide space for the jack-up leg in all revolving positions. On top of the A-Frame the boom hoist tackle is split symmetrically left & right to bypass the jack-up leg in all boom luffing positions. The crane boom is a lattice tubular structure made of extra high strength steel and the boom tip is specially designed to lift wind turbine components at high heights. Hoist winches have Lebus grooved drums, driven by electric motors connected to the drum by means of a gearbox. Hoisting speeds are continuously variable and load dependent.

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



**All lifting capacities are in metric tons. Outreach is measured from the center of rotation of the cranes (CL of crane tub).*