

ALE ERECT THE HIGHEST GOLIATH CRANE IN BRAZIL

11 March 2015



ALE have assembled and erected the highest Goliath gantry crane in Brazil.

The project, which started on-site in August 2014 at a newly-assembled shipyard, Estaleiro Paraguaçu, near Salvador de Bahia, was completed at the end of February 2015.

Having a maximum weight of 3,200t for one single lift and measuring 134m high with a span of 142.5m, the global heavylift specialists were requested by the client to execute the erection in three phases: upending of the fixed leg, upending of the hinged leg and lifting of the main girder.

After installation of the strut construction and the preparation of the ALE strandjacks system, the first phase took two days. It involved the upending and installation of the fixed leg and the tie down operations, to guarantee a safe stand-period for the fixed leg with wind speeds up to 40m/sec. ALE used nine strandjacks, five 500t strandjacks used as windbracings strandjacks, and four 900t strandjacks used for the upending operation.

For the second phase involving the upending of the hinged leg, in total seven strandjacks were required: five were 500t strandjacks used as windbracings strandjacks and two were 900t strandjacks used for the upending operation.

At the final phase, the main girder was lifted using six 900t strandjacks and two crawler cranes with a boom of more than 160m on top of the fixed leg and the hinged leg. The strandjacks were prepared in such a way so that the installation of a single strandjacks could be executed by lifting the strandjack including the strand wires and strand guidance.

When the main girder was lifted free from its supports, it was lifted approximately 16m above ground level. By means of SPMT trailers, the lower trolley was positioned and the main girder was lowered to allow the lower trolley to be installed and connected.

When all works were finished approval was given to lift the main girder to the final position. During a three-day operation, the main girder was lifted to a height of 134m above ground level.



Frank Janssen, ALE's Project Engineer who managed the project said:
"The erection of this Goliath crane makes it the highest Goliath crane in Brazil and we are really pleased with the erection and execution of this project. The project was carried out with close contact to the client and main contractor, with the erection of both legs and the main girder kept to tight erection schedules and quality procedures. As a result of this, we feel we have utilised the equipment in a safe and innovative way."

ENDS

Image 1: Lifting of main girder – end position