Heavy lift

max. capacity 416 t

Job Report

Liebherr-MCCtec Rostock GmbH, Germany LHM 600





Situation

The Liebherr MTC 78000 is one of the largest offshore slewing cranes world-wide. The onsite erection and assembly of this enormous crane on the heavy load vessel OSA Goliath presented Liebherr engineers with special challenges – for example, the planning of the individual hoists so that the maximum permitted ground pressure of the pier was not exceeded.

Task

The assembly of the MTC 78000 required several spectacular heavy duty lifts. First, the slewing platform, weighing 370 t, was mounted, thereafter, the machinery compartment with the drive components (approximately 240 t), the mast lower section (about 250 t) and the mast upper section (around 160 t).

Solution

Two LHM 600 mobile harbour cranes were used in tandem operation for the heavy duty lifts. The Liebherr hoist system Sycratronic® allows two LHM 600s to lift up to 416 t and to be operated simultaneously by one crane driver. Conventional tandem lifts with land-based cranes, that come along without software support but are entirely manually-operated, need to comply with international standards, resulting in load capacity down rating of 25% and more. The hoisting height of 43 m above pier level was made possible by equipping the mobile harbour cranes with two corresponding tower extensions.

LHM 600

Weight (t)	590
Capacity (t)	208, 416 in tandem operation (via Sycratronic®)
Max. radius (m)	58
Opt. vessel size	Capesize / Super Post-Panamax
Scope of supply includes	9.8 m tower extension

