



LHM 550

Job report

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LIEBHERR

Maritime cranes

Bulk handling, SmartGrip®



Situation

Saqr Port is located at the northern tip of the United Arab Emirates, with access to the Arabian Gulf, and is the Middle East's major port for bulk cargoes, aggregates, pipes, cement, coal and other raw materials. Saqr Port is well-known for highly efficient material handling and premium infrastructure. The port's expertise has attracted additional business which has led to increased cargo volumes, over the past 5 years.

Task

Saqr Port handles several materials with densities up to 2 t/m³ and loads on average around 5 ships per day. The most common material is limestone, which is characterized by small rocks, and when the grab is closed, some of these rocks are compressed which results in intense shaking and stress for the crane structure, due to strong dynamic forces. Thus, in order to minimize forces acting on the crane structure a smaller grab (22m³) was used which naturally reduces turnover. Saqr Port decided to install SmartGrip on their newest mobile harbour crane, type LHM 550, to cope better with limestone.

Solution

For Saqr Ports new LHM 550, the SmartGrip parameters (e.g. closing speed, slack rope values) have been specifically adapted for the rocky limestone material. Thanks to the installation of SmartGrip, Saqr Port has been able to use the bigger grab (32m³) without additional stress for the crane structure. Time-consuming overloads have been completely eliminated, shaking has dramatically decreased, leading to more driver comfort and extended life span of the crane. The result is an increased limestone turnover by more than 30%.

LHM 550

Capacity (t)	124
Max. radius (m)	48
Scope of supply includes	SmartGrip

“Installed in our new LHM 550, the innovative SmartGrip system provides valuable advantages. The system optimises our grab operation and with zero overloads, it increases our turnover plus saves our crane structure, leading to longer life span of our equipment.”

Mr. Philip Madin
Operations Manager Saqr Port