

CASE STUDY

Alimak high-speed hoists supported construction of a landmark Dubai skyscraper

When contractor Arabtec Construction Co. constructed Ocean Heights in Dubai Marina, two Alimak Scando 650 FC-S high-speed construction hoist systems with dual cars were selected to provide efficient vertical access throughout the project. Together, the two systems delivered four hoist cars to support the transportation of personnel and materials on one of Dubai's most ambitious residential high-rise developments.

Located in Dubai Marina, Ocean Heights was developed by DAMAC Properties and designed by Aedas. Completed in 2010, the residential tower rises 310 m and 83 storeys, making it one of the most recognizable skyscrapers in Dubai's skyline. The building's distinctive twisting architectural design created demanding construction logistics and required reliable, high-capacity vertical access throughout the construction phase.

The Alimak Scando 650 FC-S hoists operated at speeds of up to 100 m/min, helping to minimize transport times for both personnel and materials. Each hoist car offered a payload capacity of 2,800 kg and a car length of 3.9 m, enabling the efficient movement of large loads to active work areas throughout the project. The hoists were equipped with Alimak's frequency-control drive system, providing smooth starting and stopping performance, a valuable feature for tall buildings with many landing levels.

Designed for demanding high-rise applications, the Alimak Scando 650 FC-S featured a counterweight-free design and compatibility with the full range of Scando 650 modules and accessories. The system could be configured to meet a wide variety of project requirements, from low-rise developments to some of the world's tallest buildings. Three frequency-control motors drove each system through a high-efficiency gearbox, delivering the speed, reliability and performance required for large-scale construction projects.

The Ocean Heights project formed part of the rapid expansion of Dubai Marina, where reliable productivity and efficient material flow were essential to maintaining construction schedules. By combining high lifting capacity with high travel speeds, the Alimak Scando 650 FC-S hoists helped support the reliable and efficient construction of what remains one of Dubai's landmark residential towers today.



HOIST DETAILS

Location:	Dubai Marina, Dubai, UAE
Application:	Residential high-rise building
Building height:	310 m
Hoist type:	Alimak Scando 650 FC-S 28/39 II
No. of hoist cars:	4
Hoist capacity:	2,800 kg/car
Hoist car size:	1.5 x 3.9 x 2.3 m (W x L x H)
Speed:	100 m/min
Lifting height:	300 m