

*Case study:*

## **14 Alimak hoists at work on Manhattan high-rise construction**



*3 World Trade Center, New York City, USA, 329 m (1079')*

## Case study:

**Fourteen Alimak passenger and materials hoists will be used during the construction of the skyscraper 3 World Trade Center in New York City, USA. With the largest high speed hoists yet known and lifting heights of up to 318 m (1,042'), the hoists provided fast and reliable access on this high-demand project.**

Three World Trade Center (3WTC) is a skyscraper under construction as part of the rebuilding of the World Trade Center site in Lower Manhattan, New York City. The project lies on the east side of Greenwich Street. The building is planned to be 329 m (1,079 ft) tall with 80 stories. As of October 2015, several floors have been built above street level. The building is planned to be completed in 2018.

Fourteen Alimak construction hoists will be used during construction. Six dual hoists are installed with access to custom common towers of aluminum. Two of the dual hoist systems are configured with different car sizes to improve site logistics. One car is dedicated for manpower and has the size 1.5 m x 5.0 m x 2.3 m (4'-11" x 16'-4" x 7'-6") and the larger car on the opposite side; 2.0 m x 5.0 m x 2.8 m (6'-6" x 16'-4" x 9'-2") is dedicated for materials most of the day except for peak start and finish times.

### The first high-speed hoist of it's kind

3WTC is the first projects in the world to utilize such a large high speed construction hoist from Alimak Hek. The ALIMAK SCANDO 650 FC-S 32/50 is specially designed to meet the high demands of construction at the 3WTC.

The ultra-fast 100 m/min speed of the Alimak Scando 650 FC-S minimizes the time spent transporting people and materials to the current workfaces, while a generous 3,200 kg (7,000 lb) payload capacity and extra large 5 meter (16'-4") car length ensure that the hoists can cope with even the largest load requirements.

UBS the rental company performing the work on site for Tishman Construction is extremely pleased with the performance of the equipment on this very demanding job site.

Alimak construction hoists have been used for over 50 years in a wide range of applications, from industrial and mining complexes, chimneys and bridges, through to new building construction and refurbishment on some of the world's tallest structures.



Two of the Alimak hoists at work on the Three World Trade Center.

### DETAILS

Location:	175 Greenwich Street, New York City, USA
Application:	Skyscraper, office, retail
Hoist types:	6 x ALIMAK SCANDO 650 XL FC-S 25/50 II 2 x ALIMAK SCANDO 650 FC-S 32/50 I
Capacity:	2,500 kg and 3,200 kg (5,511 lb and 7,000 lb)
Hoist car sizes (W x L x H):	1.5 m x 5.0 m x 2.3 m 2.0 m x 5.0 m x 2.8 m
Speed:	Up to 100 m/min (300 ftm)
Lifting height:	Up to 318 m (1,042')