



ELEVATING  
EFFICIENCY

# World Trade Center New York, USA - Reconstruction -



















## **HOISTING AT WORLD TRADE CENTER**

**L'Assomption, Quebec (September 29<sup>th</sup>, 2011)**- RAXTAR and Hydro Mobile are very proud to have been selected by Atlantic Hoisting and Scaffolding to provide hoists and mast climbing work platforms in order to help build One World Trade Center formerly known as the Freedom Tower. Both companies have joined forces, with New York's premier hoist provider Atlantic Hoisting and Scaffolding, in order to create an access solution that allows transport of men and material to each floor of the projected 1776 feet high structure.

As the tallest building in America was planned, the ambitions of the nation asked constructor Tishmann Construction to allow for a construction schedule to put the building in place in time to restore confidence of the American people and the emotional attachment to "rebuild".

After comprehensive preliminary interviews Tishmann Construction then turned to Atlantic Hoisting and Scaffolding of New York/New Jersey to provide a full solution for its logistics concern of moving more than 1300-1400 men, women, tools, and materials daily to rebuild what is considered the most complicated construction project in American history. Tishmann had a strict set of bid criteria for the Hoisting contractors on One World Trade Center and the Memorial building. A long list of concerns was developed and applied to the selection of equipment to be used. Among many, a primary concern was that no Chinese content be used in any component of the hoists. A non-counterweighted design also topped the list as it related to safety and speed of erecting because this was definitely going to be considered a fast track project. As the plans unfolded, dependability was the key.

Atlantic Hoisting and Scaffolding's team led by Greg Karas had an idea to address the construction process: the common tower. A structure typically made from a 4 pole configuration of shoring and scaffolding components decked at each entry level to allow exit of the hoists and access to the building under construction to minimize the interference with the curtain wall installation. This allows the building to be closed in earlier than in conventional configurations of the Hoists. In the case of One World Trade Center, the extreme height and concern for workers safety was bringing an additional challenge to the traditional conception of the common tower.

In order to put in place an efficient solution Atlantic Hoisting and Scaffolding's team had the idea to abandon the conventional 4 pole components generally used for the common tower in lieu of actual Rack and Pinion tower sections at the 4 corners giving them a means for adapting mechanical access equipment to perform the construction of the platform in a safe and efficient way. Todd Rego, from Atlantic Hoisting and Scaffolding, whose team was instrumental in the construction and design claims he has reduced his labour during the construction process by 30% and finds the safety factor increased by an immeasurable amount.

While we all marvel in the design and enormity of the One World Trade Center building itself, it has to be recognized that the common tower is in all reality a temporary building built alongside the permanent structure. It has wind load, capacity requirements per floor and a fast tracked construction timeline much like the property under construction.

Since then, Atlantic Hoisting and Scaffolding has strategically placed 13 RAXTAR Model RX3245 hoists throughout the two side by side projects. RAXTAR was open and receptive to the specific requests of Atlantic Hoisting and Scaffolding and the ideas they had to ensure a safe and productive artery to the largest construction project in American history. Multiple RX3245SFT, 300' per minute 7000lb men and material hoists were designed with an overhead protection deck above the car for installer's protection from other trades who were working above them. The cars incorporated designs from the years of combined experience of Atlantic Hoisting and Scaffolding and RAXTAR engineers. A structural "common tower platform" is an integral part of the configuration of the hoisting areas which deliver thousands of men to the structure day and night for a job that has virtually not stopped for an hour since its beginning. A custom work platform designed specifically for the construction of the Common Tower Structure was built by Hydro-Mobile and is in constant use as the project climbs at a pace of one floor per week. Since its installation in November 2009, the hoists run 6 days a week, 2 shifts per day moving 1300-1400 men and women to all the stops on its way to an overall height of 1776' feet where the top floor will be denoted as the 82<sup>nd</sup> floor.

Since being put in place two years ago, each RAXTAR hoists have travelled the equivalent of a trip around the **WORLD!** Just to put some numbers in perspective, during the last 2 years of use, each car ran approximately 6 days a week for an average of 12,5 hours a day. At a speed of 92 m/min (300 fpm), this means that each car has travelled approximately 26,718 miles or a little bit more than the earth circumference!

It is expected that 3 additional years of use should be required before the project is completed. During the pause and celebration marking the 10<sup>th</sup> reunion of the fall of the Original World Trade Center buildings we can now see the importance and the enormity of this project as it takes over the New York City skyline.

For more information on this project please visit our special web section ([www.hydro-mobile.com /1WTC](http://www.hydro-mobile.com/1WTC)) or **[contact us](#)**

### **About Hydro Mobile Inc.**

Hydro Mobile, a privately owned corporation, is mainly involved in the design, manufacturing and distribution of mast climbing work platforms for the construction industry. Hydro Mobile platforms are distributed throughout North America and internationally through a wide network of distributors that are recognized as key players in construction equipment sales and rental. With over 6,000 platforms on the market, Hydro Mobile is unquestionably the leader of the industry.

### **About RAXTAR Inc.**

RAXTAR, a privately owned corporation, provides world class vertical access solutions: construction hoists for passenger & materials, material hoists, transport platforms and industrial lifts. RAXTAR builds on innovation & technology to deliver unequalled operational reliability at the lowest total cost of ownership (TCO) in the market. RAXTAR is a synonym for meeting the highest quality- and safety standards.

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