

# UBS

## HOISTING INGENUITY IN THE 21<sup>ST</sup> CENTURY

The Time Warner World Headquarters at Columbus Circle in N.Y.C. provided Universal Builders Supply Inc. (UBS) the unique challenge of providing the largest single building hoisting project in the history of Manhattan at over \$12 million with 12 operational hoists.

The 800' tall "twin tower" features constructed in the heart of busy Manhattan's Columbus Circle, was further complicated by the over 100 l.f. setbacks, the design by Skidmore, Owens & Merrill, Architects required. While beautiful architecturally and required by zoning, building setbacks are always a challenge in the mobilization and construction of high rise construction projects.

The building superstructure was built at a rate of 1 floor every 2 days. This two-day cycle style of construction is unique to New York City and requires a hoisting system that not only can handle the high volume of workers and materials needed to construct the building, but also must be able to "keep up" with the fast pace of work being put in place.

By being able to stay within close proximity to the floors as they were being constructed, it was reported that a worker's life was saved when he fell from his area of work, but miraculously landed on a UBS runway that was just one (1) level below where he was working. Good practice equals lucky man.

UBS' ingenuity was earlier called upon in the 1980's to revolutionize the way buildings were hoisted during construction, when the ambitious Battery Park City/World Financial Center was built. UBS introduced to Olympia & York a patented Aluminum backstructure system that allowed multiple hoists to be clustered in one location thereby improving cost, efficiency and constructability in the overall building project. This cutting edge technology, became the standard by which all future high rise buildings in N.Y.C. (and selected high rises in Texas, California, Connecticut, New Jersey, and later Europe) relied upon, and copied.

# UBS

-2-

Now, 20 years later, UBS has introduced the next generation of hoisting system that out of necessity, is technologically superior to any other in the history of the trade. With safety and efficiency paramount and the design of the Time Warner World Headquarters in the crowded confines of Columbus Circle as the template. UBS' new hoisting system was invented, to fill the technology void.

Using the technologies developed and tested on the high rise buildings at London's Canary Wharf Project, UBS incorporated a new structure to bring safety during installations and removals of the hoisting systems to unprecedented levels. By allowing approximately 90% of the installation of the hoisting system to be performed at ground level, the amount of time workers were building "in the tower" at great heights with associated dangers was greatly reduced. By assembling the 16'-0" square modules (pods) at the ground, the advantages were obvious:

- The critical "time in the tower at height" risk was minimized.
- All work was performed in a controlled environment that was safed off.
- Safety systems were available and in close proximity to work being installed.

The new UBS 10" x 10" Aluminum Extruded Leg provides 10 times the strength at only 30% more weight of older systems. Coupled with specially designed 8' wide trussed bridge deck runbacks, UBS' system allowed the 100' spans to be mastered using an unprecedented 2 spans. The added bonus of the Aluminum System is the non-corrosive properties of the alloy providing an extra level of protection from rust getting on the finished building façade, which is why other projects like the Restoration of The Statue of Liberty, Washington Monument and Grand Central Terminal all relied on UBS and their aluminum.

# UBS

-3-

When the AOL-Time Warner Construction was finished, dismantling of the Hoisting System scheduling advantages became critical as well:

Contractually, the two (2) hoisting complexes required dismantling to be completed in twenty four (24) weeks (12 weeks per side). UBS was able to expedite the dismantle for the overall advantage to the project to a previously unimaginable total of five (5) weeks (South 3 weeks, North 2 weeks), safely and without incident

UBS has set the standard in its trade since 1931 and continues to do so.