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Service-Disabled Veteran-Owned Small Business (SDVOSB)

R. Baker & Son - Demolition & Dismantling Mega Mall

Earlier this year, R. Baker & Son completed a demolition and dismantling project at a massive retail complex in northern New Jersey. The complex is being completely remodeled after construction of the substantially-completed project stalled several years ago.

A major portion of Baker's assignment was to remove nearly all of the mall's original interior finishes in preparation for reconstruction. Before demolition began, they worked closely with the construction manager to clearly identify features to be saved. While drywall, wall facades, tile, some interior framing, and other finishes were removed and disposed of, assorted storefront glass and hardware, lighting fixtures, architectural elements, elevators, escalators, and much of the mechanical and electrical equipment were carefully preserved and set aside for reuse. Baker also was contracted to perform the rigging, dismantling and removal of a considerable portion of the exterior façade, which was achieved utilizing two hydraulic cranes.

Safety was a primary focus on the project, as much of the demolition work was in the soaring upper reaches of the 5-story structure. With various demolition and high-reach equipment like atrium lifts, conventional scissor lifts and articulating boom lifts were utilized at the jobsite, numerous safety measures were taken to ensure that workers were safe and vehicle pathways were unobstructed and clear of hazards. At floor level, crew members utilized large floor-scrapers and robotic hydraulic equipment to remove expansive areas of tile and marble flooring throughout the mall. With demolition substantially completed and construction now underway, the mall is scheduled for opening in summer 2017.



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MILLWRIGHTS

Millwrights are some of the most valued members of R. Baker & Son's team, yet many people are not familiar with what this highly important job entails. A millwright is a trained professional who is responsible for the dismantling, assembling, installation, maintenance, and moving of stationary industrial machinery and mechanical equipment. An expert millwright can interpret blueprints and schematics and is skilled in steel fabrication, welding, machining, electronics, and fluid mechanics. R. Baker & Son offers millwrighting as a stand-alone service, and our millwrights, working hand-in-hand with our rigging team, play an integral part on dismantling, plant relocation, and plant decommissioning projects, as well as machinery moving and investment recovery.

R. Baker & Son's rigging and demolition team members employ a wide variety of large, powerful equipment that can demolish buildings and lift massive loads, but our millwrights, whose work on critical machinery requires extreme precision, are just as likely to be seen using micrometers to measure tolerances as small as a thousandth of an inch. Accurate match-marking is another essential millwright skill, whether the equipment is to be reassembled by the same millwrighting team or a recipient in another part of the world. The skill and finesse of R. Baker & Son's millwrighting team was on bold display recently when lyophilizers, auto-loaders, fill line, and isolators manufactured by three separate overseas process manufacturers were successfully assembled and installed, on time and on budget, at a large New Jersey pharmaceuticals plant.



HOW IT WORKS: Underwater Welding



How do you weld under water? It seems impossible. Its like asking someone to light a match in a pool. Actually welding is done under water by professionals who are not only certified welders but also certified divers with years of experience and specific training.

The welder / diver uses a tank of nitrogen or argon that blows a bubble of gas around the point of the weld allowing the arc to occur. Some welding electrodes produce enough gas to eliminate the gas bubble. Welding at deep depths under high pressure requires more advanced technology not only for the welding equipment but for the diver safety as well.

Construction Drones - Providing Eyes In The Sky



The popularity of drones has skyrocketed across the country, moving beyond the military to real estate, agriculture, and other industries, as well as recreational use. Drone technology is rapidly expanding into the construction field, and is expected to grow in leaps and bounds over the coming years.

Automated drones used on a construction site furnishes project managers with real-time aerial video and still images that allow better time and task management and lower project costs. Beyond providing clients' with a birds-eye view of their project's progress, drones collect and transmit information to specialized software that creates 3D jobsite models. This provides comprehensive insight into jobsite activities and changes on a daily basis. Distances, areas and even volumes can be accurately measured by drone software. Drones can also be used for up-close structure and equipment inspection on high rooftops and other hard-to-reach areas, for thermal imaging, to help identify worksite safety issues, and to highlight areas where work is not progressing as expected.

The use of drones in construction is in its early infancy, and developers are still working out questions of safety, privacy, and methods of use, but industry insiders agree that construction drones are here to stay. Drones are expected to be an everyday fixture on jobsites in the future, and new uses are being continually explored. For drone technology, as the saying goes, the sky is the limit.

Lifting Techniques: Prevent Back Injury

- ▶▶ Get as close to the load as possible.
- ▶▶ Squat and lift from between your legs and avoid bending at the waist.
- ▶▶ If you must bend, bend from the hips, not the waist, while maintaining your back's natural arch.
- ▶▶ Avoid lifting heavy objects resting below your knees. Get help or use a mechanical aid.
- ▶▶ Keep your spine aligned when carrying a load in one hand. Placing your opposite hand on your thigh can help.
- ▶▶ If you need to turn, don't twist your body. Move your feet, not your torso.
- ▶▶ Stretch before work to warm up stiff muscles and tendons and avoid injury.

