



Machinery Rigging Project Takes Precision Planning and Expert Execution



R. Baker & Son recently completed a challenging project at a New Jersey rendering facility.

A high-speed bowl/scroll armature needed to be removed from a large centrifuge for scheduled rebuilding and preventive maintenance while a redundant centrifuge remained in operation to keep the facility’s process online. The second armature would undergo rebuilding and PM immediately after the first rebuild had been completed.

To complicate matters, the facility did not have a gantry or steel beam installed above the machines. Rigging equipment would need to be brought in to lift and move the 6,000 lb. armatures, but access and maneuvering room on the production floor were extremely limited.

After painstaking examination and measurement of shop drawings, access points, possible routes through the production area, overhead and peripheral obstacles, and consideration of the dimensions and lifting capabilities of various rigging machinery, the Baker Team was able to determine the best equipment for the job. Our compact Versalift with a jib attachment could be used to make its way through the facility and remove the scroll armatures from the centrifuges – but just barely. According to our calculations, there would be less than two inches of clearance on either side of the lift in several areas (top photo).



On the day of the project, our rigging team slowly and carefully maneuvered the Versalift into place beside the first centrifuge. Under the watch of the manufacturer representative who would be performing the in-house rebuild, the armature was secured with slings and carefully lifted from the machine. There wasn’t sufficient room to back up the Versalift with its jib fully extended and raised

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(732) 222-3553

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to 15 feet, so our team used several come-along winches to manually retract the jib according to plan. The armature was then turned 90°, set onto a steel skate fitted with wooden cradles, and rolled to an open area for refurbishment.

Two days later, R. Baker & Son returned to the facility to reinstall the newly rebuilt scroll armature. Once the manufacturer had successfully restarted, tested, and verified proper operation over the next 72 hours, we came back twice more to repeat the entire process on the second centrifuge.

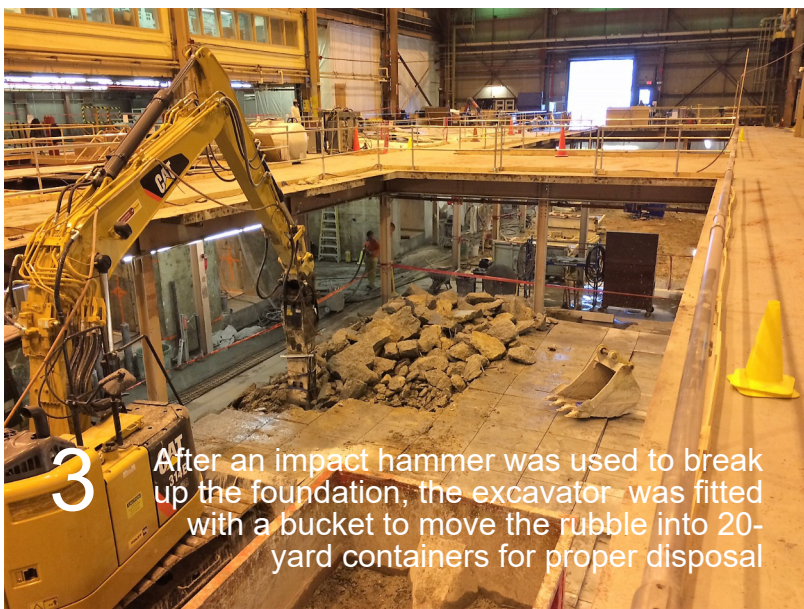
Snapshot Gallery: Scenes from a Utility Plant Demolition Project



1 A section of concrete pedestal is hoisted from below grade using the utility plant's existing gantry crane



2 An excavator is lowered into the pit after all of the pedestal sections were removed and the concrete foundation was saw-cut in a checkered pattern to a depth of 20 inches



3 After an impact hammer was used to break up the foundation, the excavator was fitted with a bucket to move the rubble into 20-yard containers for proper disposal



4 The foundation has been removed and the excavator has moved on to an adjacent pit for further demolition

Safety Corner: Spotters Play a Vital Role in Construction Site Safety

With struck-by, caught-between, and electrocution hazards among the leading causes of construction fatalities, the importance of the spotter should not be underestimated. A construction site can be a hive of activity, oftentimes with workers from different trades engaged in various tasks while heavy equipment, machinery, and vehicles move about nearby. Trained spotters safeguard personnel and property by monitoring and guiding vehicle movements.

Large vehicles and equipment such as excavators, cranes, dump trucks, and forklifts can have blind spots and leave drivers and operators with limited visibility. Spotters act as an extra set of eyes and ears on the ground, alerting them to pedestrians, potential hazards, obstacles, other vehicles, surface anomalies, and difficult terrain. They're particularly vital when working in close proximity to power lines and on utility projects where maneuvering space around energized hazards may be limited. They also help manage the flow of vehicular and pedestrian traffic to reduce the risk of collisions and injuries.

It is important that spotters be well-versed in hand signals and radio communication. Before a task can begin, operators and spotters should share a clear understanding of what it will entail and agree on travel routes and signals that will be used. Spotters should wear high-visibility clothing and maintain constant visual contact with the operator while the vehicle is in motion. It is critical that they remain fully vigilant and dedicated to their singular task and do not become distracted by other activities.



R. Baker & Son uses trained spotters on every rigging, dismantling, and demolition project and adheres to all spotter regulations, guidelines, and standards. Though spotters may often go unnoticed in the daily bustle of a work site, their presence should be recognized as a cornerstone of a safe and successful construction project.

R. Baker & Son Quality Award: NRG Astoria Dismantling Team



Congratulations to the entire crew on the NRG Astoria Power Plant Dismantling Project for their hard work, outstanding project execution, keen focus on customer satisfaction, and exceptional safety practices. Thank you for a job well done!