isting walls, and needle beams placed perpendicular to the walls.

Crib blocks, wedges and shims filled the area between the beams and the building. Emmert used three customized double-acting pump machines, each placed at three hydraulic zones along structural steel framework. Pressure equal to 80 percent of the building's weight was applied to the exterior walls of the building.

Emmert raised the building 13 inches on solid 4-foot by 4-foot crib block jacking towers, providing sufficient space for placement of 55 Emmert 70-ton hydraulic dollies on runway tracks underneath the building. After preparing the soil to 98 percent compaction, Emmert covered it with steel plates to allow the building to be moved and spun 180 degrees.

Emmert then moved the building west by winch truck with steel cables, sheave blocks, shackles and straps. Dollies were rotated in a circular pattern to orient the building for its new home across Market Street.

Emmert duplicated its hydraulic jacking towers at the original site of the Odd Fellows Hall for the building's new home. Emmert only had a half inch of clearance between the cables and an existing building. The rigging had 6 cable lines on each side of the Odd Fellows Hall, for a total of 12 lines. The pull had to be stopped and the rigging had to be adjusted every 4 feet because of the tight clearances.

After the pull across Market Street, two days were required to situate the building over the site of its new foundation. It was lowered by an average of 6 inches to 12 inches daily until reaching the precise, predetermined elevation.

After the general contractor built the new foundation and the concrete cured properly, Emmert returned to Salt Lake City and released the weight of the building onto the new foundation. Emmert safely completed the relocation with no additional structural damage or cracks.

Over 160,000 pounds: Mammoet USA makes heaviest move ever in South Carolina

The challenges faced by Mammoet USA, Inc., Houston, Texas, when it transported an important power plant component 310 miles through the Carolinas turned out to be every bit as mammoth as the load itself. Weighing in at 879,635 pounds, the stator stood 35 feet long by 19 feet wide by 18 feet high. A stator is a mechanical device consisting of the stationary part of a motor or generator in or around which the rotor revolves.

Mammoet personnel and equipment first came into direct contact with the stator on May 15, 2009, when the company loaded it onto a deck barge measuring 180 feet long by 54 feet wide by 12 feet high at the Port of Charleston, SC. The stator went directly onto a double wide 18-line Goldhofer that had been positioned on the barge for receipt of the cargo.

The barge traveled to Hardeeville, SC for offloading. Because of strong Atlantic Ocean currents nearby, Mammoet used a spud barge to steady the deck barge during offloading. After docking, the Goldhofer transporter was rolled off the barge to an awaiting Mammoet 500-ton gantry lift system, which lifted the stator from the transporter and placed it onto cradle mats, secured with Williams rods to the 500-ton suspension transport frame assembled around the stator. Mammoet jack stands supported the ends of the transport frame until final positioning on the transporters.

To transport the stator and insure proper load spreading during the move, the transport frame rested on 72 axle lines of modular transporters, driven by five prime movers. Including trans-

continued on next page