

Saving time with purpose-built jetty

7 April 2016 by MAMMOET

Saudi Aramco is constructing the Jizan Refinery and Terminal project in the Kingdom of Saudi Arabia. The refinery is scheduled to begin operation in 2017. Mammoet, the world's largest service provider specializing in engineered heavy lifting and transport, is providing heavy transport expertise and services to facilitate an efficient and cost-effective construction.

Mammoet assists Saudi Aramco to improve construction efficiency for the Jizan Refinery

The refinery will have the capacity to process 400,000 barrels per day of Arabian Heavy and Arabian Medium crude oils to produce gasoline, ultra-low-sulfur diesel, benzene, and paraxylene. The complex is located in the southwest of the Kingdom of Saudi Arabia, a remote area close to the Red Sea and Yemeni border. Mammoet is transporting over 100 large and heavy components for the refinery to site. These components would normally have been shipped to the existing Jizan port, but the 100 kilometer route between port and project site features a number of logistical bottlenecks for large or heavy loads. These include power lines that require lifting and bridges with insufficient weight bearing capacity.

Therefore, Mammoet worked with the client to develop an alternative route. In order to simplify the logistics of getting these oversized components to site, a tailor made jetty next to the project site was constructed. Mammoet helped the client to design the jetty, using engineering drawings of the transport to ensure that the jetty has the right dimensions and structure to cope with the size and weight of the components. Additionally, Mammoet provided technical information for the road design between the jetty and the project site to accommodate the heavy items. Mammoet's early involvement in the planning and design of the logistics for these components will minimize the risks along the route, reducing the chance of delays. The first components were delivered to site using the new jetty in October 2015, with more arriving regularly since then, including two components weighing over 1,000 metric tons.

Jizan Refinery will also be equipped with a new state-of-the-art port and a 4-gigawatt power plant making the refinery self-sufficient. The plant will provide power for locally owned manufacturing and service companies in addition to the area's resident communities. The combined cycle power plant, the largest of its kind in the world, will use approximately 90,000 barrels per day of vacuum residue from the refinery. Besides electricity the power plant will provide hydrogen and water for the refinery, conveying excess power to the national grid.

Mammoet will be working on the project throughout 2016, receiving and delivering oversized cargo for various parts of the Jizan Refinery complex.