



Sarens takes on the biggest project in the company's history

By Kylie Field, Thursday 20 October 2016

Sarens has recently signed the largest project in the company's history with Tengizchevroil (TCO), which will see the company undertaking the land transportation and installation of the Pre-Assembled Units, Pre-Assembled Racks, and associated oversize equipment required for the US\$36.8 billion, Future Growth and Wellhead Pressure Management Project (FGP-WPMP).



TCO, which is jointly owned by Chevron (50%), ExxonMobil (25%), KazMunay Gas (20%), and LukAgro (5%), is the operator of the Tengiz oil field in Kazakhstan. The work being carried out is designed to increase the well pressures and the production capacity of the existing Tengiz refinery, with the new plant being built on a modular basis incorporating PAUs fabricated in Korea and Italy, and PARs fabricated within the Caspian.

Under the scope of the agreement, Sarens is contracted to develop and operate two Trans-Shipment Bases (TSBs), one in Finland and one in Bulgaria, where cargo will be offloaded from ocean-going vessels and reloaded onto smaller Russian Inland Waterway System vessels for onward delivery into the Caspian. At the Kazakhstan building site, Sarens is contracted to off-load, store, stack, and transport the modules to their installation points.

In an exclusive interview with Cranes and Lifting magazine, Sarens discusses the details about this enormous project and the role they will play.

1. What can you tell us about the FGP-WPMP?

Deep beneath the western Kazakhstan steppe is a giant reservoir known as the Tengiz Field, where the oil column measures an incredible 1.6 km across. With a surface area more than four times that of Paris, France, Tengiz ranks as the world's deepest producing supergiant oil field and the largest single-trap producing reservoir in existence. Nearby, is another world-class reservoir called the Korolev Field. Chevron holds a 50% interest in Tengizchevroil (TCO), which operates the two fields.

Net daily production in 2015 (Chevron share) averaged 257,000 barrels of crude oil, 9.85 million cubic metres (348 million cubic feet) of natural gas and 21,000 barrels of natural gas liquids.

The integrated Future Growth Project-Wellhead Pressure Management Project (FGP-WPMP) is designed to further increase total daily production from the Tengiz reservoir and maximize the ultimate recovery of resources.

The FGP will use state-of-the-art sour gas injection technology, successfully developed and proven during TCO's previous expansion in 2008, to increase daily crude oil production from Tengiz by approximately 260,000 barrels per day.

In parallel, the WPMP maximizes the value of existing TCO facilities by extending the production plateau and keeping existing plants producing at full capacity. First oil is planned for 2022.

Source <https://www.chevron.com/projects/tengiz-expansion>

2. What role will Sarens have in the project?

For their US\$36.8 billion Future Growth and Wellhead Pressure Management Project (FGP-WPMP), Sarens was entrusted with undertaking the land transportation and installation of the Pre-Assembled Units, Pre-Assembled Racks, and associated oversize equipment required.

Also the customized modification and management of the TSB's is in Sarens scope.

See this as Sarens to be the main heavy lift and heavy transport contractor on the project.

3. What type of cranes will be used for the major lifts?

Over the different areas of the project, we will use different type of cranes (crawler - telescopic) in a range of 20 to 3200 tonne capacity.

4. How difficult will this project be and can you describe the lifts for our readers?

For Sarens, the challenge of the project is not in the lifts or transport activities as such, the challenge is more on the scale and the size of the project: to cope with the different interfaces.

5. How comprehensive has the lift plans needed to be for the project?

Similar to what is the high standard in the oil and gas sector and of course, in line with the project owner's procedures on heavy lift and heavy transport activities.

6. Why will TSB's be based in Finland and Bulgaria?

Decision on these locations was made by our client but of course in consultation with Sarens.

7. How long will Sarens role be in the project?

Estimated at three to four years.

8. You mention new benchmarks for the lifts. What will those be?

The new benchmarks will be set by the combination of

- Size and scale of the project
- Different locations where this all happens
- Linked to these different locations the exceptional climatic conditions for land- and water based lifting and transport activities.

