



Lubrication problems

TengizChevrOil (TCO) was undertaking a site refurbishment in the Tengiz oil field in Kazakhstan and decided to take this opportunity to replace the unreliable vertical tank top pumps that were handling the effluent produced during production.

The pumps were operating in a harsh environment where temperatures would range from -40°C to $+45^{\circ}\text{C}$. These factors led to regular lubrication problems, which was compounded by the poor after sales service from the existing manufacturer.

The new pumps had to fit within the existing installation without requiring TCO to modify any pipe work and the bearings had to be capable of running in the caustic, abrasive mix of effluent. To survive this harsh environment, the pumps had to be manufactured to a high standard using stainless steel materials. They were also a critical path item and so any export hold-ups would be a major issue.

Gaining pre-qualification

Amarinth was a relatively new supplier and unknown to TCO. In order to be considered for this project, Amarinth therefore had to go through a pre-qualification process.

A recently acquired Amarinth subsidiary, Protect System, had been supplying TCO for many years though, as had Girdlestone pumps where many key Amarinth staff had spent much of their careers.

Building on these strengths, Amarinth decided to team up with Buran Boilers, a local Kazakhstan agent, to gain the necessary pre-qualification.

The specifications were onerous, but through an excellent flow of communications between all parties, Amarinth achieved the necessary

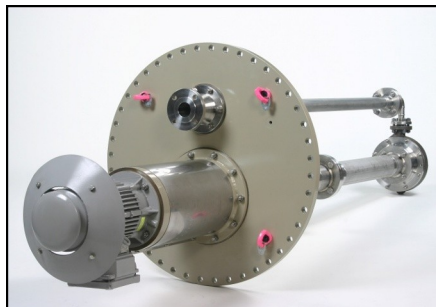
compliance very quickly.

TCO were impressed with the quality of the work and the speed at which Amarinth gained the pre-qualification and on the strength of this awarded the contract to them.

Russian translations and GOST-K

Amarinth supplied six of its proven T Series vertical tank top mounted pumps manufactured in stainless steel. The pumps were witness tested by representatives from Vetco, who were employed by TCO. They were very surprised with the performance, claiming: *"Amarinth was the only supplier to deliver on time during the whole project to date."*

One of the potential barriers to exporting industrial products into the Russian Federation is the requirement for GOST-K certification. This certifies the quality of supplied goods and their compliance with contractual terms. To achieve this, Amarinth had to convert all of the documentation, including the drawings and installation, operating and maintenance manuals, into Russian; a major undertaking. Working closely with Buran Boilers this was quickly achieved, enabling the pumps to be exported without any delays.



On-going business

TCO has extensive expansion plans in the region worth billions of US dollars and the performance of Amarinth in supplying these pumps and gaining GOST-K certification will result in future opportunities to supply TCO and other companies in the region.



TengizChevrOil

TengizChevrOil is a US\$ 20 billion investment project. This 40 year joint venture was formed in 1993 between ChevronTexaco, ExxonMobil, Lukarco and KazMunayGas. The project is developing the Tengiz and Korolev oil fields located in the north-eastern reaches of the Caspian Sea. The Tengiz field was first discovered in 1979 and is one of the world's largest oil fields and contains between 6 billion and 9 billion barrels of recoverable oil.

Buran Boilers

Buran Boilers, based in Almaty, Kazakhstan, was formed in 1997 and specialises in providing heating and water-supply systems, domestic water heaters and universal multi-purpose devices for producing the microclimate, pumps and pump stations.



"Amarinth overcame many obstacles to deliver these pumps to Kazakhstan in such a short lead time. The translation of all the documentation into Russian was a major undertaking and no-one we have worked with has gained GOST-K certification in such a short time as Amarinth achieved, it normally takes over 3 months for that alone."

David Fielding

UK representative, Buran Boilers