

## **Money out of thin air**

### **Producers of liquid nitrogen and oxygen increase their business once again**

**By Aleksandr Gorchakov, in “The Profile”, 23<sup>rd</sup> November 2009**

The problem of infrastructure is crucial in the production of oil in Russia. For example take the situation in the oil-rich Tumen province when there has long been a shortage liquid nitrogen for the treatment of oil wells. (Liquid nitrogen is used as part of a new technology to increase oil recovery from reservoirs.) As a result of this chronic shortage, liquid nitrogen had to be brought to Tumen over a distance of hundreds kilometres from as far away as Ekaterinburg, Omsk, Samara, and Novosibirsk until eventually Nefteuganskproservice commissioned the Moscow based energy and engineering company Premium Engineering to build an air separation plant to meet the needs of the people of Ugra in 2007.

At the height of the financial crisis in 2008 service companies in the oil and gas industry were struggling to survive. There were cutbacks everywhere, in drilling, exploration and maintenance, all of which were badly hit by the recession. When the oil price finally went up again, optimism returned, leaving those who had managed to consolidate a niche in the market with a secure base for future development. Among such companies is Nefteuganskpromservice, the biggest independent Russian producer of liquid nitrogen and oxygen.

Ilya Nuriev, its financial director, says they started business in 2003 with a small plant, little more than a shop for filling cylinders with oxygen. They had a minimum workforce: Vadim Bykov, the director, filled cylinders with gas while the chief engineer loaded them and chief mechanic drove them to the clients. They all had their sights on the future.

From the very beginning the aim of Ilya Nuriev and his colleagues was to construct a large-capacity plant. This ambition was realized in 2005 when the company signed the agreement on long-term cooperation with RN-Uganskneftegas. Their choice of engineering partner also turned out to be fortuitous. They engaged Premium Engineering for the plant design, supply and commissioning. This Russian company offered the most attractive terms on guarantees, quality and price. “Other companies did not want to get involved in delivery, customs, or obtaining the necessary documentation and permissions for foreign equipment,” explains Ilya Nuriev. “Added to which here is a company with storage for spare parts - other companies do not offer this kind of service.” Nuriev is only interested in first class equipment, which in this case is not produced in Russia, but imported from the US,

Italy, China. On the technological front Premium Engineering works closely with US based Red Mountain Energy Corporation to provide durable and innovative solutions. “The project we undertook with Premium Engineering is a landmark- the first independent private project of this type and on this scale.” Ilya Nuriev asserts.

The air separation plant was built on the Pravdinskoe oil-field, products were certified by the D.I. Mendeleev Research Institute. Representatives from Rosaviakosmos, chemists and metallurgists toured the site and were impressed by the compactness of the plant, and the way in which the complicated process of separating air inside an Air Separation Unit, ran so smoothly. The real cost of such first class equipment turned out to be lower than the price of any comparable ASU, either from abroad or from the domestic market.

- “We supply our whole region with all its nitrogen, and 60% -70% of its oxygen,” says Nuriev.

At the end of 2008, Nefteuganskpromservice suffered a steep decline along with the rest of the oil industry. According to Ilya Nuriev, in November-December profits fell by 60%, and there was a sharp decline in sales and shipments. January 2009 was the worst month in the history of the plant and led to the shutting down of the second ASU. However, by early February, as the oil price increased, there were signs of growth. “In March we commissioned a third ASU and by May we had reached our planned production capacity – up to 3800 tons per month”, says Ilya Nuriev. Today the total cryogenic production capacity is 5.5 tons per hour.

In February 2010 a fourth ASU will be commissioned at the oil-field Gazpromneft – Noyabrskneftegas, and the construction of a fifth ASU is being planned once again using the services of Premium Engineering. The two companies are focused on resolving the problems of associated gas which are most urgent in Western Siberia.