As part of the Garlyk mining and processing complex, Delkor was involved in the manufacture and supply of four 30 meter (98ft) diameter hydro-separators designed for feed de-sliming. Delkor also supplied two 32 meter (105ft) diameter high-rate thickeners for slime suspension and two 39 meter (128ft) diameter high-rate thickeners for flotation tailings.

For such a chemically abrasive environment, high caliber lining products were needed to offer high levels of chemical resistance. Delkor turned to AkzoNobel’s protective coating brand International®, which has a long track record of supplying hard wearing chemical and abrasion resistant linings into the mining industry. Both lining and protective coating products were applied to both the internal and external tank areas.

The lining used inside the thickener tanks required both chemical and abrasion resistance to withstand the stresses of the solid-liquid separation process. Enviroline® 376-F60 was chosen not only for its good abrasion and chemical resistance, but also for its ability to be applied at the required thickness of 1,500µm (59 mils) in a single-coat. This is also advantageous in terms of productivity and low application cost.

“A global effort, coordinated between Russia and India, led to the selection of Enviroline 376-F60” said the Mining and Metal Market Manager for AkzoNobel, India. “Not only was a chemical and abrasion resistant lining required, it was also essential that the quality of the product supplied was consistent, regardless of its country of supply”.

“We were equipped, with our global capabilities to meet the needs of the customer, which led to the supply of 34,000L (7,479gal) of Enviroline 376-F60 to the Garlyk mining and processing complex”.

The complex also called for anticorrosive coatings for the tank externals. These were again chosen from AkzoNobel’s International® product range, where Interseal® 1052 and Interthane® 990 were applied as a two-coat system.

“We have been using AkzoNobel’s International® products for all our overseas customers and from our experience the commitment on the delivery and quality of the product from them is excellent” said U.Nanje Gowda, General Manager – Procurement of Tenova, Delkor India. “We have discussed the local market with AkzoNobel and we thought of using their International® products for all our domestic projects due to their commitment to meeting the requirements of the local market conditions” Nanje Gowda added. “We asked them to carry out tests for a two-coat system against the three-coat systems we have been following, in order to reduce costs without compromising on quality, while still being able to meet the domestic market needs”.

“AkzoNobel have carried out the tests and passed, they are competitive with our local suppliers and we are delighted to now begin using the International® coating scheme for domestic projects.”

Delkor India PVT Ltd, a subsidiary of the Tenova Group, is responsible for the supply of equipment to the Garlyk Potash Project in Turkmenistan. Delkor is also the supplier to OAO Belgorschimpan: the Belarusian research and design institute for the mining and chemical industry. Belgorschimpan is currently in the process of developing an all new state-of-the-art mining complex in Turkmenistan; the Garlyk mining and processing complex. This new and innovative complex is destined to produce potash via an agreement with the Turkmen government. Upon completion, it is scheduled for commission in early 2015.