PIPES AND MANHOLES FOR STRATEGIC AVIATION BASE

By Sergey Uzhvyuk

27 June 2012 marked the start of reconstruction at the Russian Air Force base near Engels, Saratov Region. The Engels Airbase is strategically important, as highlighted by Vladimir Putin, President of the Russian Federation, during a meeting in Saratov on 14 June 2012: "Serious consideration will be given to the modernisation of the airbase infrastructure. We have been commissioning about 7 new modernised airbases per year for the last four years, 28 in total. Another nine airbases are currently being reconstructed in Severomorsk, Chkalovskiy, Engels, Akhtubinsk, Krymsk, Eisk, Lipetsk, Chkalovsk in Kaliningrad Region, Korenovsk. Their modernisation lead to over 40 billion roubles worth of contracts. The work is currently being carried out and I hope it will be implemented to the best standards and on time".

The reconstruction of the airbase was split into several stages, the first of which was completed in 2014. In February 2015, UAT OJSC Holding began preparation for the next large-scale stage, the reconstruction of the existing airfield, construction of new aircraft parking, renovation of the drainage network, installation of local waste treatment facilities and the construction of fuelling areas. The work began in March.

The second stage of airbase reconstruction was ready in November and the third stage of construction began in early August. This was carried out by specialists from Dorcentr who were working on the construction of water and drainage networks and local treatment facilities.

A construction project of such importance and tight deadlines depends on the coordination of materials suppliers if it is to run smoothly. The selection requirements were therefore particularly stringent, taking into account a range of factors including production output, technical support, previous experience and financial health. IVK AIR-Group, the airbase facilities

reconstruction division of POLYPLASTIC Group, was chosen to supply elements for water and sewer networks and local waste treatment facilities.

The specialists from POLYPLASTIC Group and IVK AIR-Group approached the task responsibly. Materials were not limited to pipes but included the full range of products: CORSYS type pipes, plastic manholes based on CORSYS SVT, reservoirs for local

waste treatment facilities made of CORSYS Plus pipes, fittings of different diameters ranging to 2200 mm. In addition, the technical team at POLYPLASTIC Group designed and produced special fittings for CORSYS Plus pipes with a diameter of 2200 mm that completely meet airbase construction regulations.

Project Management CJSC, the design company, used plastic manholes during the airbase reconstruction. This seemed impossible just a few years ago as there was a common belief that the market did not have the materials or producers able to offer alternative to traditional reinforced concrete manholes. Experts from IVK AIR-Group and POLYPLASTIC Group worked together to challenge the existing beliefs, first developing a solution on paper that proved the effectiveness of a polymer application instead of reinforced concrete. This was later proved in practice at Makhachkala Airport where their innovative designs were implemented for the first time.

All materials for the manholes: pipes, sheets etc. are made by POLYPLASTIC Group. This guarantees quality backed by the laboratory, the quality control department and by feedback from the construction companies. Each element goes through scrupulous tests and quality control prior to dispatch to the site. Everything gets checked from appearance and geometric characteristics, to the leak and impact resistance of the connection pipes.

This project has given POLYPLASTIC Group and IVK AIR-Group the opportunity to showcase their precision capabilities and raise the bar in production capacity.

The project will meet the standard and deadlines thanks to the smooth and coordinated working practices of all companies involved in the construction.