# STEPNOGORSK: RECORD START-UP OF THE UNIQUE LINE

*Press-service of POLYPLASTIC Group*

**At the end of December 2014 Kazakhstani mass media reported a start-up of the new unique CORSYS ARM line for production of pipes with diameters from 800 to 1600 mm at Arystan pipe plant, Stepnogorsk. However, these reports did not show why this event was truly unique – unprecedentedly short terms of implementation.**

The advantages of polyethylene are known for many years: light weight, flexibility, high chemical and corrosion resistance etc. One of the major parameters for large diameter pipes used for non-pressurised systems is hoop strength that ensures pipe operation at high outer loads. That is why PE pipes with structured wall, inner smooth and corrugated outer surface have become wide spread. Such design allows to reduce the weight and therefore the cost of the pipe while maintaining the hoop strength. The main feature of CORSYS ARM pipes is the profile with the steel basis that does not get in contact with neither transported agent not the ground, that is how significant hoop strength is achieved while reducing the total weight and cost of the pipe. CORSYS ARM pipes can be installed at any depth or at a smaller depth with heavy transport loads and their cost, in most of the cases, turn out to be lower comparing to the other profiled systems even at the hoop strength difference of greater than 1.5 times, which is more unusual for plastic pipelines. Moreover, the production technology allows to produce the pipes of any length and only limited by the capability of the transport.

CORSYS ARM pipes were implemented in Kazakhstan in summer 2014 for the first time for sewer pipelines renovation in Kostanay. The new pipe had drown a lot of interest from contractors and customers, the prospect of pipes implementation in Kazakhstan was without doubts. That is why the decision was taken to start production of CORSYS ARM pipes at Arystan Plant in Stepnogorsk as transportation of large diameter pipes from Central Russia was not cost effective. Moreover, flexibility and operational efficiency can only be achieved with local production.

Klimovsk pipe plant was undergoing works for increasing production capacity and increasing CORSYS ARM range to 2000 mm and installation of the new line. Then the decision was taken to move the existing line for CORSYS ARM pipes up to 1600 mm to Arystan. It was complicated by the fact that Klimovsk Plant was shipping CORSYS ARM pipes to Astana for the project of renovation of storm water sewer from Tlendiev to Seifullin street. It was necessary to complete the move within a very short period of time in order to fulfil the contractual obligation. Moreover, the start-up of the line before the New Year holidays was a very important factor for designers and suppliers to plan projects for 2015.

The strict plan of the move was designed by the specialists from Klimovsk Pipe Plant: only 4 days were allocated to decommissioning and loading, 5 days for installation at Arystan, 4 days to start-up of the line and training for the specialists from Arystan. Thanks to strict organisation and precision of the department of Klimovsk Plant, the seemingly impossible had been done, i.e. decommissioning started on 1 December and production of the first Kazakh CORSYS ARM 1200 mm pipe was produced by Arystan Pipe Plant on 23 December with dispatch of the pipe to the customer before the end of the year.

A number of water disposal pipelines construction and renovation using CORSYS ARM pipes is being designed in Kazakhstan. Production at Arystan Plant will significantly reduce the costs of transportation and increase the efficiency of orders completion as well as ensure Kazakh content of the product, which will give an extra advantage during design and construction of pipeline projects in Kazakhstan.

We are confident that high efficiency innovative CORSYS ARM pipes will find their place amongst the modern plastic piping that are used for large pipeline infrastructure projects.