Project Details

Project name: ...............  Additive (DRA) dosing unit for high pressure pipeline

Contact: .....................  Cepro, a.s., Mr. Ivo Jirovsky, investment manager

Scope of works: ..........  Basic and detail design, production and start-up of the additive dosing unit

Period: .......................  October 2017 - March 2018

Project details: .............  Company Cepro operates more than 1000 km product pipeline network in The Czech Republic which interconnects 17 fuel terminals. The pipelines operation is essential for the company operation. Cepro have been using DRA (drag reducing agent) for many years and during the time the existing dosing units became obsolete and started to cause many operation problems.

The new units were designed and produced by VAE CONTROLS who has much engineering and application experience with similar scope. It is accommodated in robust steel frame which can be easily handled by fork lift truck and transported by easily to desired location. Inside the frame is located piston-type dosing pump with PLC controlled piston stroke which enables dynamic change of the flowrate. Typical flow rate is around 5 litres/hour. Actual flow of the additive is measured by mass flowmeter. The PLC-based control unit and electrical equipment is located in 2 explosion proof cabinets directly on the frame. Operator can control the unit and set the desired flow by push buttons and see actual parameters on screen. The control unit is ready for integration to existing terminal automation system over communication line and operation data can be also downloaded to carry-on laptop. On the top of the construction is fixed 1m³ IBC container which is used as operation storage of DRA. The unit is also equipped by second pump for DRA unloading and circulation / homogenisation. The entire unit is designed for outdoor use in Ex zone 1.