Automation of a skid mounted filtration system (fully transportable system)





Customer information

The Opalium group is a subsidiary of Veolia in Fontenay sous bois, France, and provides water filtration for communities which have to purify less than 10,000 cubic metres of water per day. Their filtration systems are mounted on skids (fully transportable system). This makes it possible to start up the water treatment plant very quickly. Primary customers include communities, as well as companies such as Générales des Eaux.



Task

- Provision of automated control of two membrane filtration skids for water treatment in the city of Condat – Lardin (Dordogne)
- This installation is to be set up by Opalium for Générale des Eaux
- The skid must function autonomously, and be extremely reliable
- It must communicate continuously with a master system (Schneider) which controls the overall system
- Maximised reduction of cabling and wiring expenses

Solution

- Install two decentralised CPX-FEC modules in order to implement control and processing of all of the data for each skid
- Program the various sequences on the FEC nodes of the CPX
- Set up a human machine interface (HMI) interface by means
 of the FED-50, in order to configure the parameter of each filter, and to control and diagnose each one.
- Connect the controllers by means of IP addressing in the Ethernet
- Communication with the Schneider controller via Modbus TCP
- Layout and supply the air preparation system
- In order to simplify and reduce commissioning time, assistance provided by Festo during startup to all those involved in the process

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