

Smart Sewers

Flovac Monitoring System

The Flovac Monitoring System (FMS) shows the operating conditions of the vacuum station, collection chambers and the Flovac interface valves.

Smart Information

One of the tenets of "Cities of the future" is that all main infrastructure is "SMART"

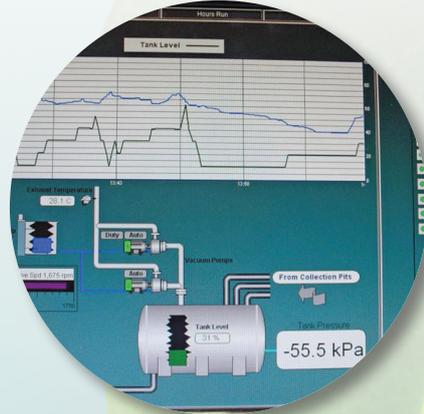
The Flovac Monitoring System (FMS) allows operators to immediately respond to potential risks in the sewage network. This is an advantage that vacuum systems have over gravity systems in that all aspects of the system can be monitored by the asset manager or operations team. If energy use is rising or evidence of infiltration occurring these issues can be addressed and easily responded to.

The ability to quickly be aware of a problem and respond to the exact location is also a major benefit, especially when dealing with either remote or large schemes.

Flovac have developed a MODBUS communications protocol for monitoring all aspects of your vacuum sewerage system. The monitoring takes place in two main sections.

1. The Vacuum Pump Station
2. The Reticulation Network

All information can be sent via a web based system or linked to SCADA and relayed to a PDA or remote office. Touch screen operation is also available at the VPS.



Monitor the Electrical and Mechanical Equipment at the Vacuum Pump Station



Overflow Risk Warning System

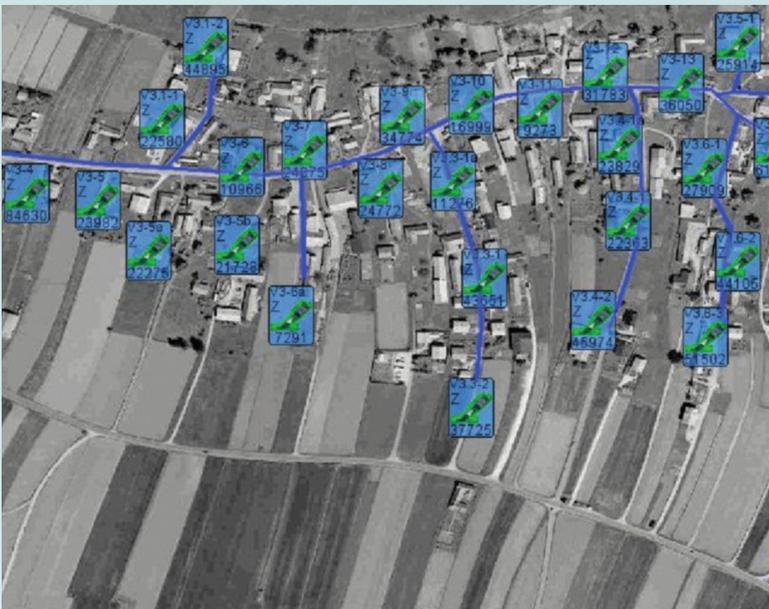


Monitor Operation of the Vacuum Valve

Flovac Monitoring System



The entire system can be monitored by a touch screen at the vacuum pump station or via the internet, or by a mobile device



The operator can monitor each time the valve opens or closes and informs the operator of any illegal stormwater entry to the sewer system during rainfall events.

- Identify the location of breaks or leaks in the vacuum main.
- Monitor energy consumption at the vacuum pump station
- Overflow risk warning alarm at the collection chamber
- Monitor mechanical and electrical equipment at the vacuum pump station
- Monitor the opening and closing of the vacuum valve, with an alarm notification of a valve jammed open.
- Monitor and graph the vacuum pressure within the system.
- Record the open time of the vacuum valve and monitor the air/liquid ratio
- Detect any inflow or infiltration into the vacuum system
- Monitor temperature at each collection chamber
- Monitor odour emissions at the vacuum pump station
- Monitor the flow rate of the system