

FLUIDWORKER INSTALLATION AT VTL GROUP

Rob Davey, UK Equipment Business Development Manager, has completed a very successful FluidWorker trial at VTL Precision in Bradley, Huddersfield.



The VTL group specialise in the design, development and manufacture of components and sub-assemblies for automotive power train applications. To achieve this VTL are using single machines with tank volumes normally between 400-1500 liters filled with Hocut 4730 and 795 FR.

The purpose to install the FluidWorker on one of the VTL machines, M68 EMAG BA 400 was to measure how bacteria contamination could be reduced and controlled over a time of 4-5 weeks. One of the challenges with some of the tanks was that swarf fills up quickly.

Every 6-8 months the systems were emptied, cleaned and refilled with new emulsion. When a bacteria and pH drop occurred, tank side biocides, as well as pH adjuster were added to the system. Occasionally, smell was an unpleasant effect of bacteria. VTL found the FluidWorker interesting, mainly due to the HSE benefit it would provide.

According to Rob, the FluidWorker was very simple to install, pretty much plug and play; he also explained how the control screen is easy to use and very user-friendly.

As the VTL tank was shallow and filled with swarf, the suction inlet had to be optimised to the cleanest area available. An optional inlet filter was also added to ensure that the pump wasn't damaged, which could limit the flow. This had actually been a problem in a previous trial, so keep in mind to install the inlet in the clean tank.

After installation, July 18th 2018 the bacteria contamination of $>10^5$ CFU/ml was reduced very quickly. The pH remained on the same level without addition of pH booster. The bacteria remained low during the rest of the trial period, $<10^3$ CFU/ml.

Surprisingly, the FluidWorker reduced the levels of bacteria very quickly and continued to control with no biocide additions at all, says Rob.

The FluidWorker will now be displayed at the SECO Tools Inspiration Through Innovation event, October 9-10th 2018, and several trials are scheduled with other customers.

Rob's recommendations in brief:

- Ensure that the inlet is put in the clean tank and if needed protected by an inlet filter.
- The controls are password protected so nobody unauthorised can change the setting.
- Check the suction filters regularly along with the pump pressure and maintain above 0.5bar.