

Chemical-free bacterial control in metalworking fluids is beneficial both for health and finances

Metalworking fluids are required in the metalcutting industry. To keep them from being affected by micro-organisms, hazardous biocides are typically used in the fluid concentrate or as additives.

Today, an alternative to biocides is available – FluidWorker from environmental engineering company Wallenius Water. The purification is continuous, allowing for a reduction or elimination of biocide handling. The active treatment process is based on Wallenius AOT (advanced oxidation technology), which is a combination of UV-disinfection and active oxygen that breaks down the micro-organisms without using biocides.

“Metalworking fluids account for a large portion of production costs – not only in their initial purchase, but also the handling and disposal costs,” Hans Ahlgren, account manager, says. FluidWorker requires fewer metalworking fluid changes, in turn cutting down on unplanned machine downtimes. The results are increased productivity and lower overall costs.

The European Chemicals Agency (ECHA) indicates that it will restrict the use of substances with potentially severe impact on people and the environment. Part of the restriction dictates some so-called sensitizing substances have to be declared at lower concentrations than previous limits. Clear risk information is an advantage for all users, allowing them to choose what substances they want to avoid.

FluidWorker complements the customized solutions used for other system sizes. An obvious advantage is that no adjustments are required and users can complete the installation themselves without interrupting production. Fluid Worker can double the life span of the metalworking fluid, so great profits are available. GKN Aerospace, formerly Volvo Aero in Trollhättan, installed a customized system in 2012. It has significantly improved the work environment for about 75 employees.

“If we can avoid one change of cutting fluid, we estimate that the entire investment has paid back,” Anders Calestam, coolant manager, GKN Aerospace, says.

“Employee health and safety are always top priority. That is why we limit the use of biocides,” adds Roger Wallin, coolant co-ordinator, who has worked at GKN Aerospace in almost 30 years.

For more information, contact:

Hans Ahlgren

+46 (0) 8 120 138 37 | hans.ahlgren@walleniuswater.com

Wallenius Water is a Swedish environmental engineering company that develops and markets upstream solutions to clean fluid flows in industrial processes. The systems are used to clean ballast water in ships, recirculated water in fish farms and metalworking fluids in the metal cutting industry. Wallenius Water solutions are marketed in Europe and Asia. For more information: www.walleniuswater.com