

## GKN Aerospace invests in health

**GKN Aerospace in Trollhättan continuously works to create a good working environment for its employees. In accordance with this ambition, the company became one of the first in Sweden to select biocide-free bacterial control in their cutting fluids.**

Bacteria and fungi thrive in cutting fluids. The bacteria lower the pH-value and when their numbers are large enough, the cutting fluid loses its functionality. The most common way of controlling them is to add bacteria-killing biocides that are hazardous for both humans and the environment. GKN is well aware of the risks with cutting fluids and biocides. The primary reason for investing in Wallenius Coolant System was to improve the work environment.

*"Health and safety are always our top priorities. That's why we limit the use of biocides",* says Roger Wallin, cutting fluid coordinator who has worked in the company for almost 30 years.

### **High pressures and cutting speeds create a lot of aerosols**

The aerospace industry demands extreme precision. This means that the operator must control measure the component several times during production. To avoid exposure of aerosols (particle fog), operators use respiratory protectors every time they open the machine.

*"As we work with very high pressures and cutting speeds, a lot of aerosols are created",* says Anders Calestam, who works with coolant systems. To that end, he and Roger Wallin, cutting fluid coordinator, strive to limit the amount of bacteria and biocides in the aerosols. Four years ago, a number of employees reported illnesses that were probably related to the cutting fluid. Respiratory problems and runny nose were some common symptoms.

### **Wallenius Coolant System**

The Wallenius Coolant System was developed to continuously reduce and control bacteria in cutting fluids. The system is based on Wallenius AOT, which is a technique that imitates how nature breaks down micro-organisms, through a combination of active oxygen and UV-light. The bacterial reduction is continuous in the cutting fluid as it passes through the system without creating any byproducts.

### **High demands from the chemistry legislation**

Maria Tornvall, works as environmental engineer at GKN. She says that the company prioritizes safety, environment and health. Meanwhile, legislation places higher demands on chemicals management.

*"We constantly strive to reduce chemical uses. Every time a chemical is handled, we might be exposing someone to risk",* Maria says.

### **Profitable investment**

Since the Wallenius Coolant System installation, GKN has not had a single unplanned production stoppage or coolant-related sick leave. The need for system maintenance is also very low. GKN expects that the investment will quickly pay off financially as well.

*"If we can avoid one cutting fluid change, the entire investment has paid off",* Anders Calestam says.

### **For more information, contact:**

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