Coil Cleaning At Electronic Parts Manufacturer

**Problem**
A customer, part of a global operation that produces a diverse range of electronic components, had three factories in the Czech Republic. Good performance from the air cooled chillers was critical to avoid equipment overheating, which can cause quality issues. The customer was therefore having their own employees clean the chiller condensers on a regular basis. Chem-Aqua was given the opportunity to clean one of the three industrial air cooled chillers, while the customer’s team cleaned the other two.

**Analysis**
Chem-Aqua’s technicians cleaned the chiller with a proprietary method and specialised equipment. The cleaning began with mechanical removal of debris, which were then flushed out with high water flow and low pressure. A specially-designed foaming product was then applied to the coil surfaces. The product and impurities were flushed and all surfaces rinsed. Finally, a proprietary biocide was applied for disinfection.

Before/after air flow measurements were taken at five points for each panel. These air flow readings were compared with ones from the condensers cleaned by the customer’s team.

**Solution**
Air flow improvement for the chiller Chem-Aqua cleaned averaged 130%. Air flow improvement for the chillers cleaned by the customer’s team averaged 35%. The Chem-Aqua cleaning work also resulted in improved heat transfer efficiency and a reduced risk of production failures. The customer was impressed with these results and asked Chem-Aqua to clean the chillers in two other locations.

Chem-Aqua’s coil cleaning service greatly improved the performance and energy efficiency of the customer’s air cooled chillers.