

C A S E S T U D Y

DGTH Produktions GmbH Germany



OVERVIEW

DGTH is a leading supplier of zinc die-casting components for the automotive industry.

WATER SYSTEM CHALLENGES

Cooling tower water is used for the cooling of the tools. As makeup water for the cooling tower circuit, DGTH uses a blend of city water with approx. 14° carbonate hardness and rain water. Due to the hardness concentration of the sump water in the cooling tower, the maintenance engineers had reported a diameter decrease in most of the cooling ducts of the tools. This problem was countered by a partial softening (to approximately 10°dH) and coping with the existing problems by acid cleaning the tools water passages. The softening system required regular regeneration with approximately 2m³ fresh water and 50 kg of salts every 3 to 4 weeks.

SOLUTION

In May 2003 DGTH installed a 3" ION **ScaleBuster**® SB80-16E for a flow of 40 m³/h (175 gpm) at the discharge of the cooling tower pump and decommissioned the softening system.

RESULTS

The solution resulted in the effect of lime-free tool cooling ducts and the discharge locations of the re-circulating water (which previously required regular de-scaling) was free of scale and maintenance free.

DGTH estimates that including the saved salts, the ION **ScaleBuster**® had amortized after less than 2 years.

*"We estimate that, including the saved softeners, the ION **ScaleBuster**® had amortized after less than 2 years. We are also happy to have contributed to our environment by making this decision."*

ABOUT THE TECHNOLOGY

The patented **ScaleBuster**® technology completely replaces traditional chemical treatment; providing control of scale and corrosion in various water process systems to create an exceptionally clean system. This dramatically reduces energy and water consumption, while reducing or, in certain cases, eliminating toxic water discharge to the environment.