

# Success Story

Application: Machine Coolant

Industry Classification: Automotive



**Background:** An engine manufacturer was experiencing daily downtime to maintain a system of bag filters which were protecting its high pressure pumps and tools. The company was plugging drills and taps resulting in broken tools. The manufacturer was excessively changing its bag filters, due in part, to the tramp oils prematurely blinding the bags. In addition, the existing system design led to coolant foaming which overflowed onto the pumps, bag housings, and floor.

**Solution:** A Phoenix filter combined with a new tank design was installed. Fitted on the tank was a new high pressure, positive displacement pump. The new design significantly reduced much needed floor space. Coolant from the plant's central system is fed into the Phoenix. The discharge from the Phoenix is to the new clean tank where the high pressure pump takes its suction and feeds the machines.

Application Details:

Flow Rate: 60 gpm  
Micron Rating: 50 micron

Filter Specifications:

Filter: Phoenix 12VDC  
Temperature: Ambient

**Results:** This manufacturer has experienced no system downtime related to dirty coolant over the last 18 months versus daily downtime prior to the Phoenix installation. The Phoenix has eliminated plugged tools and tool life has increased by over 120%. The cleanliness of the coolant in the high pressure clean tank has improved significantly and there is no foaming. Further, the manufacturer has eliminated the excessive costs of using bags and has had zero maintenance costs with the new design.

**Date:** September 2001