ZGF Spring Filter Technology Eliminates Bag Filters and Realizes Significant Value including Lower Total Operating Costs & Safer Work Environment



Metalworking / Machining



The ZGF Phoenix filter has (6) proprietary ZGF Spring Filter elements with 50µ Absolute Gap



ZGF Electro-Pneumatic Phoenix provides uninterrupted flow of clean machining coolant to the tools

## **Customer Challenge:**

An engine manufacturer was experiencing daily downtime to maintain a system of bag filters which were protecting its high-pressure pumps and throughcoolant tools. The company was plugging drills and taps with small Aluminum fines resulting in broken tools. The manufacturer was excessively changing its bag filters, due in part, to the tramp oils prematurely blinding the bags. These frequent bag changes placed a burden on the limited plant maintenance team. In addition, the existing system design led to coolant foaming which overflowed onto the pumps, bag housings and floor creating a worker safety concern.

## **Our Solution:**

The bag filters were eliminated and replaced with a ZGF Phoenix filter. The Phoenix filter is fully automatic and fitted with (6) 50µ Absolute Gap, ZGF Spring Filters. The Phoenix filter provides uninterrupted flow of clean coolant to the high-pressure pump and critical tooling. The ZGF Spring Filter elements are a non-disposable, stainless-steel coil with a 5-year warranty.

## **Results:**

- No system downtime related to dirty coolant
- The Phoenix has eliminated plugged tools
- Tool life has increased over 120%.
- Increased Productivity: No un-planned downtime for plugged or broken tools.
- The cleanliness of the machining coolant in the high-pressure clean tank has improved significantly
- Eliminated coolant foaming and worker safety concerns.
- Virtually no filter system maintenance
- Eliminated the cost of bag filters and the associated costs to purchase, ship, inventory, changeout, and disposal.

Lower Total Operating Costs, Increased Productivity, Safer Work Environment, Reduced Labor, More Environmentally Responsible, and Consistent and Reliable Filtration