

*Automotive Component Manufacturer  
Implements ZGF Spring Filter  
Technology and Improves Process  
Reliability and Reduces Total Operating Costs*

The Most Advanced, Automatic,  
Non-Disposable Liquid Filtration System



Metalworking / Machining



**Each pod contains (7) proprietary ZGF Spring Filter elements with a 50 $\mu$  absolute gap**



**ZGF EC700S Pod cutaway view to show how elements are configured in pod**



**ZGF EZ Clean EC700S, 13-Pod, permanent media, fully automatic filtration system rated at 1,500 gpm**

**Customer Challenge:**

A manufacturer of automotive components was having challenges in their Aluminum machining operations. The central coolant filtration system did not have the capability to meet the coolant cleanliness requirements. So, 40 $\mu$  bag filters were added at each machine. The bag filters created a burden on the maintenance staff and an unplanned recurring cost.

**ZGF Solution:**

ZGF installed an EZ Clean EC700S, 13-Pod automatic filtration system. The filtration system is fitted ZGF's patented, 50 $\mu$  absolute gap, Spring Filter elements. The fully automatic, permanent media filtration system addressed both issues.

**Results:**

- The ZGF Spring Filter elements with a 50 $\mu$  absolute gap provided significantly finer and more consistent filtration than the 40 $\mu$  bag filters
- Implemented finer filtration at the machines
  - ✓ 40 $\mu$  bag filters were reduced to 25 $\mu$
- Reduced Bag Filter Change Frequency:
  - ✓ Before ZGF: 40 $\mu$  bags were changed 1 time per shift
  - ✓ After ZGF: 25 $\mu$  bags were changed every 30 to 45 days
- Increased Productivity:
  - ✓ Before ZGF: Production was ceased for all bag filter changes.
  - ✓ After ZGF: Bag changes can now be scheduled when production is down.
- Improved Tool Life – The consistent, reliable, and finer filtration provided by the Spring Filter has increased tool life
- **Total Operational Improvement and Cost Reduction Achieved**
  - ❖ **Reduced Labor and Maintenance. The filtration burden is gone.**
  - ❖ **Reduced Total Operating Costs**
  - ❖ **Improved Process Reliability & Quality**