

Gasoline Refinery Installs ZGF Spring Filter Technology to Protect Sensitive Equipment with Payback < 1 year, Less Maintenance

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



Oil and Gas



Each Pod has (1) proprietary ZGF Spring Filter element with a 25 μ Absolute Gap



**(2) x ZGF EZ Clean EC100, 4-Pod Explosion Proof
Design Flow / System: 30 gpm
Operating Pressure: 300psi**

Customer Challenge:

A gasoline refinery was using 15 μ cartridge filters to protect sensitive analytical equipment used to analyze unleaded gasoline. On average, the cartridges were changed every 8 hours, and at times every 20 minutes. The refinery was seeking an automatic alternative to reduce the total operating cost associated with protecting the analyzer. These costs included the cartridge cost as well as ordering, shipping, stocking, labor to replace cartridge, and the increasing cost of disposal.

Our Solution:

ZGF proposed an on-site trial using a single ZGF Spring Filter element and pod. The objectives were to determine the removal effectiveness of a 25 μ ZGF Spring Filter and the appropriate number of filter elements necessary to accommodate the analyzer specified flow rate. Based upon the trial data and the available footprint, ZGF provided a single skid containing two separate filtration systems each filtering a separate sampling stream. Each filter system consists of four (4) stainless steel filter pods, each with an explosion proof, 3-way, pneumatically operated valve for backwash. The control panel is built and wired for an explosion proof environment.

Results:

- ❖ **1-year payback** based solely on replacement cartridge cost, excluding labor, disposal, shipping, inventory, purchasing and other associated costs.
- ❖ **The ZGF Spring Filters with a 25 μ Absolute Gap provided consistently better filtration than the 15 μ disposable cartridges.**
- ❖ The disposable cartridges placed an excessive burden upon maintenance. **The ZGF system is virtually maintenance free.**

Lower Operating Costs, Reduced Maintenance and more Consistent and Reliable Filtration.