



aerospace
climate control
electromechanical
filtration
fluid & gas handling
hydraulics
pneumatics
process control
sealing & shielding



Static Control Filter Elements

The Latest Innovation from Parker Hannifin



ENGINEERING YOUR SUCCESS.

Static Control Filter Elements

Together we can...

Preserve the environment.
Minimize waste and promote energy efficiency.

Achieve worldwide filtration solutions.
Build global confidence.

Redefine new limits.
Forge ahead with advanced technology.

Keep contamination under control.
Reduce maintenance costs.

Enhance total system reliability.
Focus on customer satisfaction.

Reach optimum potential.
Drill to greater depths.

...engineer your success.

Studies have suggested that varnish is formed due to the thermal and oxidative degradation of oil. It also has been suggested that the localized heat generated from a static charge discharge can reach several thousand degrees. Hot enough to cause localized thermal degradation of the oil. The static discharge can also cause pitting of metallic surfaces in a system.

Manufacturers of combustion turbines have recognized the relationship of static discharge causing thermal degradation and subsequent varnish formation to the extent that they have suggested turbine users to choose coarser filtration, including switching from

Micro-glass to less efficient Cellulose filter media and also to decrease flow density by operating duplexing filter changeover valves in the center position. Parker Static Control filter elements eliminate these compromises and ensure proper system filtration performance.

What can Varnish do to a System

- Sticking servo-valves
- Plugged filters
- Build up on surfaces, heat exchangers, reservoir walls, and bearing surfaces



Pitting on filter end-cap



Varnish is attracted to metal surfaces, this results in an overall decrease in productivity.



Burnt polymer pleat support mesh from arcing

Static Control Filter Elements

Applications

Parker has developed a unique modified filter media technology to aid industry in controlling static build-up in non-conductive hydraulic and lubricating fluids.

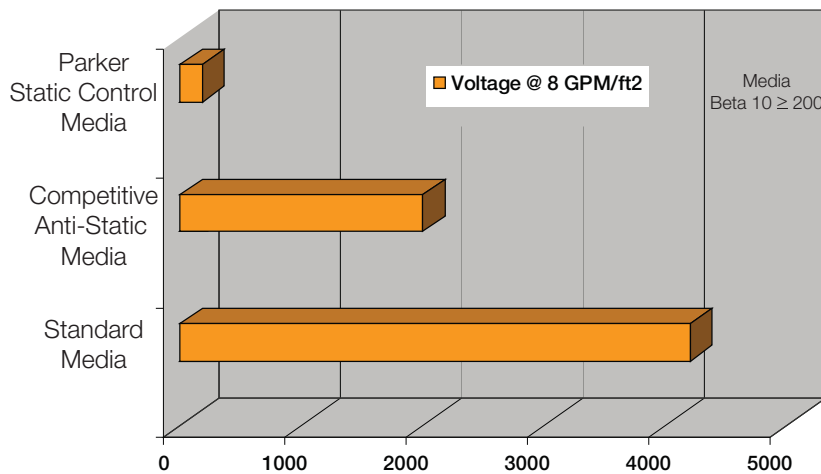
Parker's new patent-pending, static control filter media reduces triboelectric charging that occurs in a fluid system equipped with typical filtration materials. Triboelectric charging

can result in a sudden static discharge (sparks in the oil) that eventually causes varnish, and damages oil and system components. The discharge can also damage the filter element by burning and pitting the filter media. The static control filter material can be made available in a wide variety of element configurations.

Typical Applications

- Turbine Lube Oil
- Control Systems
- High Flow Hydraulic Circuits
- Test Equipment
- Kidney Loops

LABORATORY TEST RESULTS



MEASURED DISCHARGE VOLTAGE

Test Parameters for above Results

Fluid Type: ISO 46 Ashless Hydraulic Oil
 Fluid Conductivity: < 100 pS/m
 Test Temperature: 40°C (100°F)
 Filter Type: In-Line T-type Pressure
 Media Flow Density: 8 GPM/FT² (320 LPM/M²)

Why Use Parker Static Control Filter Elements

- No compromise in efficiency, dirt holding capacity, or flow pressure drop
- No vessel modifications required - drop in solution
- Available in a wide variety of element configurations

Filter	2 Micron	10 Micron
RF4/50P-1	932668A	932670A
RF4/50P-2	932677A	932679A
IL8-2	933044A	933046A
IL8-3	932872A	932874A
15CN/15P-1	932610A	932612A
15CN/15P-2	932616A	932618A
40CN-2	932653A	932655A
40CN-3	926698A	926893A
80CN-1	932659A	932661A
80CN-2	932665A	932667A
80CN-3	933218A	933220A
30P-1	932622A	932624A
30P-2	932628A	932630A
30P-1-AX	933580A	933581A
30P-2-AX	933582A	933583A
MPD-1	935516A	935518A
MPD-2	935488A	933520A
15P-1-AX	933576A	933577A
15P-2-AX	933578A	933579A
718	934179A	933913A
736	934180A	933920A

Note:

Replace "Q" with "A" when model coding an assembly with above static control filter elements in Catalog 2300-14.