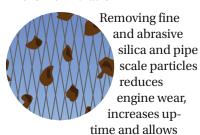
# **Filtration Solutions**

#### **Micronic Filtration**



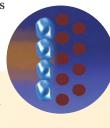
our customers to meet equipment warranty specifications. From 5 to 5,000 gpm, Velcon's DFO Series filters can meet critical downstream ISO 4406 Cleanliness Standards in both bulk and dispensing (Point-of-Use) applications.

- Reduced operating costs due to fewer repair and replacement of equipment
- Reliable engine performance with ISO 4406 Cleanliness Standards compliant fuel
- Extended equipment uptime as less maintenance is required
- More efficient fuel consumption with fewer contaminants

## Protection from particulate and Water (Absorption)

Velcon has been the leader in providing products that can absorb (chemically bind) free water, while filtering particulate from diesel fuel. Our Aquacon AD

Series products have over a 30 year history of proven application success and is ideal for use in fuel polishing.



- Removes both particulate and water contaminants in fuels to meet stringent downstream ISO 4406, ASTM D975 and EN 590:2009 cleanliness standards for both diesel or biodiesel fuels
- Filtration prevents damage to injectors
- Constricts flow when media reaches capacity
- For applications up to 5000 gpm

## Particle & Water Removal (Coalescing)

Water is the primary cause of pump and injector failures in diesel

engines and can displace diesel fuel's lubricant coating on high precision injector components.
Water can be introduced throughout the fuel delivery process. Velcon's DI Series coalescer and DSO Series separator work together to separate water and aid in removing water from diesel fuel.

- Removes water from bulk diesel fuel
- Meets stringent ASTM D975 and ISO 4406 fuel cleanliness standards
- Flow rates from 100 to 5000 gpm

### **Fuel Condition Monitoring**

Velcon offers various unique tools that will allow monitoring of diesel fuel quality throughout the distribution process, and

process, and through custody transfers with the correct blend of products, from disposable test kits to real-time precision instrumentation that measures particulate and water contamination simultaneously.

- VCA®-D (Velcon Contaminant Analyzer for Diesel):military grade in-line full flow sensor system that simultaneously detects and differentiates between particulate and water contaminants in real time. Can detect pipe scales, particulate and water from truck pipelines, dirt and water from storage
- icountACM20, icountBSplus, icountOS: portable and online particle counters with proven laser detection technology
- HKD (Hydrokit® Diesel): portable test kit to help determine concentration of water in diesel fuel

# **DFO - Micronic Filtration**

## High Quality Filtration for Diesel and Biodiesel Applications

Diesel fuel is stored and transferred multiple times from refining to dispensing. Preventative action does not always eliminate contamination. Common contaminants introduced during transportation include both extremely fine and abrasive silica as well as pipe scale. These contaminants can quickly deteriorate fuel quality below engine manufacturer standards, reducing the durability and performance of the engine.

Velcon's DFO filters transform contaminated fuels to meet stringent downstream ISO 4406 cleanliness standards for the demanding limits placed on diesel and biodiesel fuels. The DFO design balances high surface area and depth filtration to maximize filter life which reduces filtration costs.

### **Tiered Ratings**

To meet industry fuel quality standards, Velcon developed pleated media filters for diesel and biodiesel fuels. In accordance with ISO standards, the DFO filters were designed with tiered media classification using absolute rated media. Each media tier provides a unique solution from managing fuel contamination to final fuel conditioning.

- DFO filters with ratings of 2 and 4 micron are the ultimate solution to condition fuel for dispensing while assuring ISO 4406 Cleanliness Standards are consistently met. Each progressively tighter DFO filter rating delivers additional particle removal and fuel cleanliness; therefore progressively lower ISO 4406 particle counts.
- The mid-range DFO filters of 6 and 10 micron extend filter life following secondary conditioning by removing particulate contaminants and allowing Velcon's downstream coalescing products to focus on water removal rather than particle removal.
- The DFO filters rated at 25 and 40 micron are the ideal solution to manage contaminated fuel entering and leaving terminal storage tanks throughout the fuel transferring process.

