

Synteq[™] DRY Coalescing Technology

Is Your Fuel Synteq[™] DRY?

Advancing fuel filtration technology for modern fuel systems and today's biodiesel blends



The Need for More Effective Fuel Water Separation

Water in a high-pressure common-rail fuel (HPCR) system is devastating. It can cause injector failure due to premature wear, rust or corrosion resulting in costly downtime and repairs. In fact, water is shown to cause up to 30% of HPCR system failures.

As HPCR systems have become commonplace in vehicles and equipment, the need for more effective fuel water separation has grown exponentially. Demanding work environments, unpredictable climates, and inconsistent fuel sources all add to the challenges.

Even the fuel we use can be an adversary. Many of the new additives and biodiesels can change fuel chemistry. Detergents and additives not found in previous fuel formulations make it more difficult to remove water from today's fuel. These substances can even coat filter media fibers, dramatically limiting their ability to effectively repel water over the life of the filter.



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Unfortunately, most current filter technologies struggle to effectively remove water over the life of the filter. Traditional barrier filters may not offer the ideal level of protection called for in more formidable work environments and they become increasingly ineffective over time. Even some of the best coalescing technologies operate at only around 35% water removal efficiency or less, when nearing end of life.



A New Standard in Fuel Filtration Technology

To remove more water from fuel, many engine and equipment manufacturers are adopting coalescing technologies, and Donaldson has set a new standard with our revolutionary Synteq[™] DRY coalescing technology.

This advanced technology uses proprietary filtration media and a unique multi-stage approach to coalesce and remove water from fuel. This process removes significantly more water than traditional barrier filters and first-generation coalescing filters, particularly under today's challenging fuel conditions, and performs consistently for the entire life of the filter.



Layered Coalescing Media Particle removal and merging of coarse and emulsified water



Coalescing Wrap Water droplets grow and fall to bowl



Hydrophobic Screen Barrier screen repels and drops any remaining water

Synteq[™] DRY Removes More Water

Donaldson Synteq DRY Coalescing technology maintains an industry-leading water removal efficiency through the end of filter life.

Field data proves that Synteq DRY provides the protection your equipment needs and the performance you want.



Drier Fuel Means Reduced Equipment Ownership Costs

Most maintenance managers hope to reach the 500,000-mile mark before replacing injectors. The reality is that users are having to replace injectors closer to 350,000 miles.* The maintenance intervals for off-road hours of usage follow a similar pattern.

Removing more water using fuel filters with Donaldson Synteq DRY Coalescing technology can result in longer injector and pump life, fewer repairs, and warranty claims — resulting in lower operating cost for equipment owners.



(Longer Injector & Pump Life

Reduced Downtime & Repairs



Fewer Warranty Claims



Donaldson.

Survey was conducted with service centers representing 90,000 repairs annually throughout the U.S. and Brazil, with particular focus on the southern U.S. due to humid climate conditions.



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