

## Mobile Fuel Dispensing Solution | Bulk Diesel Filter (BDF2) with TestMate® Contamination Monitor (TCM)

### Background

Refueling mobile equipment in the field can be a challenge, largely because the quality of fuel can vary dramatically from one source to the next. **Today's Tier III and Tier IV diesel powered equipment cannot tolerate the water and particulate found in most stored fuels**, which can lead to equipment down time and costly field repairs. The Schroeder Industries Mobile Fuel Dispensing Solution, the Bulk Diesel Filter (BDF2) provides superior single-pass diesel fuel filtration and continuous water removal for mobile fuel dispensing applications where the cleanliness and water content of fuel being used by mobile equipment is critical.

The BDF2 incorporates standard features like Schroeder's fully synthetic Excellement® Z-Media® in the pre-filter at three or one micron ratings, along with our patent-pending fully synthetic coalescing water removal technology used in the fuel/water separator assemblies. This combination of filtration technology provides a lower overall cost-to-operate system along with better performance, thanks to the higher contamination capacity, higher efficiency media. The BDF2 is designed to support up to 32 gpm flow rates while providing >95% water removal efficiency and 99.9% (beta 1000) particulate removal efficiency.

The BDF2 can be fitted with additional features that provide additional benefit to the operator. The Automatic Water Drain feature provides minimal operator intervention while ensuring that water is always drained to ensure sustained, high efficiency water removal; and the 12V DC sump heater option ensures consistent drain operation in freezing climates. The TestMate® Contamination Monitor (TCM) can be added to the dispensing filtration circuit to provide real-time fuel cleanliness and water content after filtration, ensuring clean and dry fuel is being dispensed.



Bulk Diesel Filter | BDF2



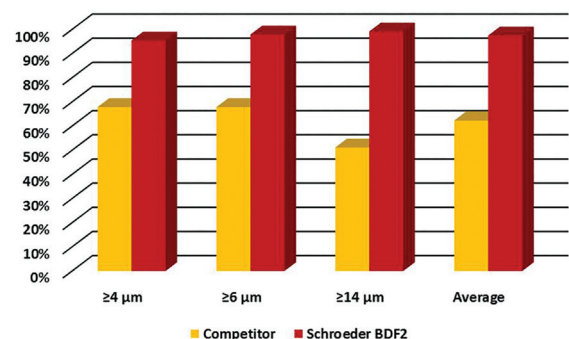
TestMate® Contamination Monitor | TCM

### The Results

During a field trial comparison between a leading competitor and the BDF2, fuel cleanliness and water content was measured and recorded for both solutions. Fuel was initially measured at an ISO code of 21/20/17 on average with an absolute water content of 181 ppm.

The results of the field trial showed that the Schroeder BDF2 was a superior solution, providing a 57% increase over the particulate filtration efficiency of the competitor during the test. This means that while the competitive product allowed 4 out of 10 particles to pass through their filter, The BDF2 solution retained 99 out of 100 of those particles, providing downstream particle counts of down to 14/11/7 (per ISO 4406:1999). With an initial water content of 181 ppm, already below the 200 ppm water content recommendation according to the World Wide Fuel Charter, the Schroeder BDF2 was able to remove additional emulsified water down to an absolute water content of 148 ppm.

Field Trial: Particulate Removal Efficiency



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Drawings

