

---

CASE STUDY

Diesel Purification

---

# Maximizing Fleet Performance with Advanced Fuel Filtration

---



**KAYDON FILTRATION**  
Filtration Group®





## BACKGROUND

A midsize construction company operating a large fleet of heavy equipment faced critical fuel management challenges that were threatening operational efficiency and equipment reliability.

To address these issues, the company set out to overhaul its entire fuel storage and refueling operation, replacing multiple smaller tanks and dispensers with a larger capacity centralized fuel storage and dispensing system.

As part of this transition, they also recognized the need for a more advanced fuel filtration solution capable of consistently delivering clean, reliable fuel to protect their assets and support the demands of high-volume construction operations.

## THE CHALLENGE

### KEY PAIN POINTS:

- **Excessive Filter Maintenance:** The company relied on spin-on filters across both refueling trucks and fueling dispensers, but contamination issues caused these filters to clog quickly. This created a significant maintenance burden, resulting in equipment downtime and increased labor costs.
- **Operational Delays:** Because delivered fuel frequently contains significant impurities, every fuel delivery required a mandatory 24-hour settling period before use, creating scheduling constraints and limiting operational flexibility during critical project phases.
- **Equipment Protection Risks:** With millions of dollars in construction equipment constantly at risk from fuel contamination, the company faced the potential for catastrophic engine damage and equipment failures that could sideline operations for weeks.





## THE KAYDON FILTRATION SOLUTION

To support the success of their upgraded fuel storage and refueling operations, the company installed a **Kaydon Filtration Bulk Fueling Filtration Skid**. This robust system is specifically engineered to address the unique challenges of maintaining fuel quality in larger storage tanks and high-volume operations, providing the reliability and protection required for demanding construction environments.

### SOLUTION ADVANTAGES:

- **Advanced Filtration Technology:** The bulk fueling filtration skid delivers superior filtration performance that eliminates the need for frequent filter changes and fuel settling periods, addressing the core operational pain points.
- **Protection Against Water Contamination:** The filtration system efficiently removes water from fuel to prevent corrosion, microbial growth, and engine failure, ensuring reliable equipment performance and minimizing costly downtime.
- **Immediate Fuel Availability:** The system eliminates the 24-hour fuel settling requirement, allowing immediate use of newly delivered fuel while maintaining optimal quality standards.
- **Comprehensive Equipment Protection:** Advanced filtration technology provides reliable protection for expensive construction equipment, preventing costly damage from fuel contamination.
- **Operational Efficiency:** Faster refueling capabilities and reduced maintenance requirements translate into improved productivity and reduced downtime.
- **Cost Reduction:** The robust filtration system decreases filter replacement frequency, minimizes labor requirements, and improves overall productivity.



## ASSET PROTECTION FOR HEAVY-DUTY OPERATIONS

Kaydon Filtration's advanced fuel filtration solutions streamline fuel management and protect critical equipment assets in demanding construction environments. Engineered for reliability, our technology safeguards valuable equipment and maintains fuel quality, supporting the productivity and performance that construction operations require.

