

# Backing Up the Back Up

How Kaydon Filtration Clean Fuel Systems Saved the Day

Kaydon Filtration was contacted by a large data processing facility in southern California to provide diesel fuel filtration equipment for their back-up diesel fuel tanks:

## Application Data

Provide water and particulate removal for back-up diesel fuel tanks

Filtration system must eliminate water to prevent biological growth

Diesel Fuel Tank # 1 = 8,000 gallons

Diesel Fuel Tank # 2 = 8,000 gallons

Filtration system must be able to (1) provide filtration for either tank, (2) transfer fuel from Tank # 1 to Tank # 2, and (3) allow the option of both filtration systems to operate on the same fuel tank.

Each filtration system must operate Monday-Friday and turn each fuel tank twice per day.

Filtration system must shut-down when fuel tank is in use with a diesel generator

System shutdown on "low fuel tank level"



**As the photo shows, these systems have been piped to operate individually or together, depending upon the requirement. Each system uses a water collection drum for the water that has been removed from the fuel. The solenoid valves open or close, depending on which operation the system is called to perform.**

Based upon the customer's application requirements, Kaydon Filtration provided two Clean Fuel Systems CFS-30 (30 gpm). Each system was piped to provide fuel filtration to meet the requirement of filtration for each tank (Normal Operation), transfer from one tank to another (Transfer Operation), and using both filtration systems for one tank (Quick Clean-Up Operation). Programming of the CFS system PLC was required to provide the operator the ease of changing from one operation to another by using the operator interface touchpad. In addition to meeting the different operating requirements, the system also needed to shut-down on either a low fuel tank level or when the fuel tank begins service with the diesel generator. Kaydon Filtration met the requirement by accepting an input signal into the PLC of the CFS system to trigger a shut-down for either situation. Since the fuel tanks were 8,000 gallons each and the customer required a high turnover rate, a 30 gpm system operating for nine hours per day, Monday-Friday, was selected. In normal sizing of a CFS system, only two turns per week is required, but if special requirements are needed, such as with this application, Kaydon Filtration can accommodate the custom requirements to meet the operational needs for each specific installation. In addition to all of the special requirements, the system provides the primary requirement of eliminating water from the fuel.



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