



When Power is Critical

**IPU**  
GROUP  
Fuel Conditioning

# CANARY WHARF, LONDON



## LOCATION

Central London, UK

## BUSINESS SECTOR

Financial Institution

## SIZE

15 storey office building

## EQUIPMENT

2 x 70,000 litre bulk tanks

## CHALLENGES FACED

1. IPU's DieselCheck fuel test found that the existing fuel polishing unit was ineffective. Both storage tanks were contaminated with water, colloid carbon, asphaltine deposits and gums, resins and varnish crystals.
2. One of the tanks contained 2-3 times more water than is acceptable according to EN590 standards.

## SOLUTIONS DELIVERED

1. In partnership with Optimum Power Services, IPU removed the old fuel polishing system and replaced it with Diesel Defence.
2. Diesel Defence DD90 provides a flow rate of up to 90 litres per minute and maintains fuel to EN590 and ISO 4406 standards.
3. Alongside a fuel polishing unit the team installed vent TRAP filters to prevent dirt and moisture from entering the tank.

*“ We could see from the test results that the previous on-tank polisher wasn't up to the job. It required a lot of maintenance and allowed the fuel to fall well below international standards. Diesel Defence is easier to use, reliable, and ensures diesel stays within the clean fuel standard EN590 .*



Peter Crowden  
Fuel Conditioning Operations Manager  
IPU Group



IPU's Diesel Defence maintains fuel quality.

## BACKGROUND

IPU's fuel team were called by the site's facilities management company to sample the diesel in their two 70,000 litre bulk tanks. Analysis showed that the fuel was heavily contaminated with water, colloid carbon, asphaltine deposits and gums, resins and varnish crystals. Such was the level of particulate, it was not possible to assign an ISO cleanliness code because the samples were out of range. This proved that the original polishing system was ineffective in protecting the fuel and so the decision was made by the facilities management company to decommission and replace it.

## INEFFECTIVE LEGACY SYSTEM

The legacy fuel polishing system used a centrifugal separation technology more commonly found in marine applications. While the unit featured an element of self-cleaning it meant that a dedicated tank was required to discharge solid matter and contaminated fluids. The maintenance of this system had become troublesome as it required frequent manual draining. To remove the hazardous waste a certified professional was required on site.

## THE SOLUTION: DIESEL DEFENCE

IPU Group and Optimum Power Services (OPS) proposed replacing the legacy fuel polishing system with a Diesel Defence DD90. The DD90 will reliably maintain the fuel, be autonomous in operation and could be effective on diesel that included up to 20% biodiesel.

The DD90 offers improved energy efficiency over the legacy system and removes the need to frequently drain hazardous waste from a collection tank, resulting in a considerable annual saving. The Diesel Defence polishing unit also has the capacity to circulate the entire contents of each bulk tank at least 7 times per month, the optimum amount for a complete and thorough circulation.

Alongside the DD90, IPU and OPS also installed vent TRAP filters to prevent dirt and moisture from entering the tank through open air vents.

## ABOUT IPU GROUP

IPU's Fuel Conditioning division provides a complete range of products and services to detect and eradicate harmful diesel fuel contamination. The range includes products for bulk fuel storage tanks, day tanks, vehicles and gensets.

**140,000 litres**

**maintained by Diesel Defence  
on this site**

[www.ipu.co.uk/fuel](http://www.ipu.co.uk/fuel)

### IPU Group Fuel Conditioning

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