

Product Datasheet

DIESELCHECK TESTING SERVICE & TESTING KITS

When Power is Critical



Because you can't fix what you don't see

DIESELCHECK SERVICE & KITS

Fuel Testing

It comes as a surprise to many that diesel needs maintenance. 64% of our customers think their fuel is fine – the first they know about a contamination problem is when their generators splutter and die.

Our data shows that over 95% of tanks are contaminated.

Dirty fuel is a threat to the safety and continuity of critical services. If you manage a data centre, hospital or bank, the first you might know about fuel problems could be when your backup power fails and critical applications cease to function.

To protect your business IPU recommends DieselCheck, a comprehensive diesel testing service and range of self-service kits. After all, you can't fix what you don't see.

DieselCheck fuel testing service

IPU's DieselCheck Diesel Testing Service provides you with an accurate 360 degree view of your fuel quality. We test your fuel and provide you with an easy to understand report. If required, it also recommends a course of corrective actions that will restore your fuel and protect your gensets.

Self-service DieselCheck testing kits

IPU can also supply self-service testing kits. They allow your maintenance staff to conduct tests according to your own schedule. We can even train your team how to use the tools to ensure you receive the most accurate and reliable results.



DieselCheck Fuel Testing Service

Importance of fuel testing

The fuel we buy today is a blend of petrochemical diesel and FAME, a biological element that reduces the environmental damage caused by burning fuel. Diesel has contained 7% FAME since 2011. This proportion will steadily rise. While biodiesel is great for the environment it's a problem for anyone who stores fuel because it contains water. It's there when the fuel is manufactured and it attracts more water while it's stored. Water is the enemy of clean fuel:

- water is a contaminant in its own right
- water promotes microbial growth (otherwise known as the 'diesel bug')
- water accelerates particulate contamination from solids like rust

Today's common rail diesel engines operate at injection pressures up to 35,000psi and are extremely sensitive to the slightest contamination. Abrasive particles and water can quickly cause enough damage to take equipment out of service. This can lead to expensive repair bills, reduced productivity and untold reputational damage.

Testing the whole of the tank

During a DieselCheck diesel test, our engineers take a sample from the top, middle and bottom of each tank. This is a crucial step. If you only test at a single depth you could get a misleading reading.

For example, if you take a sample just from the bottom of the tank you may see a high concentration of water. This is because water coalesces and sinks to the bottom. However, if you only take a sample from the top of the tank you may see fuel that looks a lot cleaner than the majority of the stored diesel. IPU provides you with a complete view of your fuel to make sure there are no nasty surprises.

Our short video explains our testing process: www.ipu.co.uk/video-protection-against-fuel-contamination

What does the IPU DieselCheck service examine?

IPU's DieselCheck Diesel Testing Service examines:

- Particle Count to ISO4406 or NAS: a measure of the general cleanliness of fuel calculated by counting the amount and size of particle contamination.
- Karl Fischer Water Content to IP438: a measurement of the dissolved, emulsified and free water in your fuel.
- Adenosine Triphosphate (ATP) Test: an ATP test accurately determines the level of microbial activity in fuel.
- Metals Content: spectrographic analysis detects levels of wear metals within your fuel.
- Bio-Diesel Content: analysis of the exact amount of biodiesel (FAME) in fuel.

Self Service Testing Kits

Why self test?

While IPU can support you with regular testing, we understand that you may prefer to conduct your own tests according to your own schedule. For example:

- You may wish to carry out your own tests in critical or highly contaminated environments where fuel has to be tested on a weekly or fortnightly basis. Such frequent visits would be prohibitively expensive to outsource. Self-service is a more cost-effective option.
- If your fuel storage tanks are located in high-security buildings where site access is difficult you may prefer to conduct your own tests. Although IPU has conducted many tests on government and military sites and are familiar with security clearance procedures, some customers prefer to skip the disruption and do the testing themselves.

For self-testing we offer the IPU Fuel Test Kit. It contains a complete set of tools that allows you to monitor the quality of your diesel.

Training for self testing

If your maintenance staff are new to fuel testing or would like to refresh existing skills IPU can train your staff how to accurately test diesel using the IPU Fuel Test Kit. This can either be carried out at your site or at IPU's global headquarters in West Bromwich, UK.

What's included in the fuel test kits?



