

SUPERIOR FILTER ELEMENTS FOR CLEAN, RELIABLE DIESEL



DIESEL DEFENCE
Fuel Polishing



IPU's filtration media ensures reliable and economical fuel cleaning.

The exceptional performance of IPU's Diesel Defence fuel polishers is the result of unique hardware working in conjunction with our extraordinary filtration media.

IPU offer three ranges of media:

- FiltaSorb, a revolutionary media that removes water to under 100ppm across an impressive range of flow rates.
- FiltaSolid, a range of recleanable and disposable media to remove solid particulates from 1 to 800 microns.
- FiltaMesh, a recleanable wire mesh media that delivers low-cost initial cleaning.

Filter elements are designed to fit IPU's main range of fuel polishers¹, giving each of them the versatility to tackle everything from initial cleans to final polishes.

Efficiency

IPU filter elements offer a range of filtration efficiencies from low-maintenance 80% media to ultra-safe 99.9% extraction efficiency.

Economy

By combining different elements in the same polishing unit you can keep operating costs low and protect your diesel-powered equipment.

Versatility

IPU's main Diesel Defence polishers¹ can use all our filter element types from coarse initial cleaning media to final polishing elements.

¹ Excluding the entry-level Diesel Defence DDF1

Let's talk

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WHY DOES ABSORPTION MATTER?

Water is diesel's most challenging contaminant. Despite its potential to damage engines, it is an integral part of today's diesel. Because biodiesel is hygroscopic, it attracts even more water during storage.



Biodiesel: both good and bad

Modern diesel contains a significant percentage of biodiesel. This reduces its environmental impact, a benefit we can all appreciate and applaud.

But biodiesel also contains water. Water is a contaminant in its own right and it encourages the microbial growth that is known as 'the diesel bug'.

Water, diesel & biodiesel

Water affects the performance of diesel, leading to increased degradation and microbial contamination. As more biodiesel is added to our diesel blends to make them more environmentally sustainable, the fuel's interfacial tension (IFT) falls and its ability to absorb water from the atmosphere increases.

Traditional coalescing techniques for removing water are less effective due to the lower IFT. As biodiesel content rises, coalescing will become less and less effective.

Absorption remains the best way to remove water from modern diesel fuels and, in the case of IPU's FiltaSorb, it represents a low cost and rapid clean-up solution.

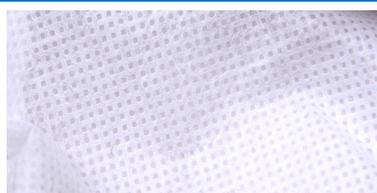
Unbeatable performance

FiltaSorb absorbs up to three times more water than its leading competitor while also operating at much faster flow rates.

Third party field trials and our own internal testing has proven that FiltaSorb is capable of rapidly reducing water content in modern diesel fuels from many thousands of ppm to under one hundred ppm. There is no other product currently on the market that comes close to matching its cost-effective performance.

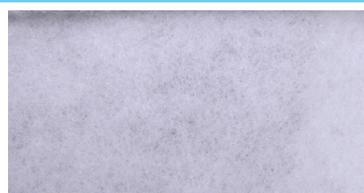
- Up to three times more water absorption capacity than its leading competitor.
- Impressive flow rates up to 1,000lpm (litres per minute).
- Versatile cartridge design.
- Effective filtration down to 1 micron.
- Most cost-effective water removal system.

FiltaSorb



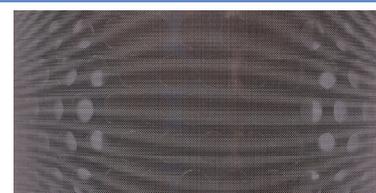
FiltaSorb (FW) water absorption filter elements offer an unbeatable combination of economy, efficiency and high flow rate performance.

FiltaSolid



FiltaSolid (FP) particulate filter elements are available in micron ratings from 1 to 800 and efficiencies from 80% to 99.9%. Disposable and recleanable versions are available.

FiltaMesh



FiltaMesh (FM) mesh filter elements are available in 10 or 20 micron versions. The hard-wearing, recleanable mesh elements are an economical way to provide basic cleaning.

PRODUCT HIGHLIGHTS

Removal handle



Changing IPU's filter elements is a simple, fast and clean process.

The integrated removal handle lets you lift the entire element out of the housing in a single motion.

The handle makes it equally easy to drop the used element into a suitable disposal container.

Universal¹ fit



IPU filter elements come in two sizes that match the housings used on our polishers.

By standardising on two housing sizes we make it easy for one polishing unit to tackle a wide variety of contamination issues. All you have to do is change the filter elements to match the level and nature of the contamination.

This versatility is especially valuable where contamination levels fluctuate wildly e.g. mobile polishers.

¹ Excluding the entry-level Diesel Defence DDF1

Speed & efficiency



IPU's filter media combines efficient filtration with flow rates up to 1,000lpm. One without the other is an unattractive proposition to anyone with a large volume of fuel to clean and a looming deadline.

As the FiltaSorb performance graph on page 5 shows, our filtration media makes a rapid and substantial impact on contaminated fuel. Fuel quality is improved in seconds and comes back 'on spec' in minutes.

Easy maintenance



IPU's Size 2 filter elements have a voracious capacity to absorb water and retain contaminants.

Their generous retention capabilities reduce the maintenance burden on any operator. FiltaSorb retains three times more water than its closest competitor, meaning a third of the visits to replace the filter elements and a third of the replacement costs (both parts and labour).

Clever design cuts costs and reduces maintenance.

CASE STUDIES



Canary Wharf, London
Replaced high-maintenance, ineffective polishing unit; brought fuel into compliance with EN590.

www.ipu.co.uk/case1001

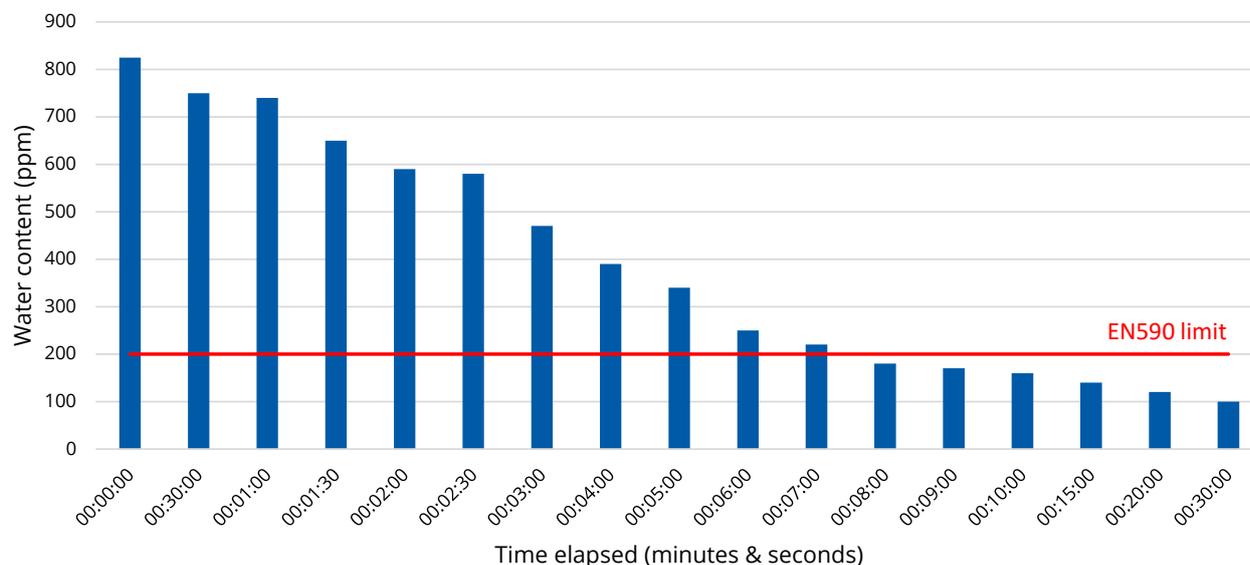


Good Hope Hospital
Fuel cleaning brought fuel into compliance with ISO4406 and EN590; no man-entry was required.

www.ipu.co.uk/case1002

PROVEN PERFORMANCE

FiltaSorb Performance



SPECTACULAR PERFORMANCE COMES FROM SUPERIOR DESIGN

International standards for fuel cleanliness (e.g. EN590) require diesel to contain no more than 200 parts per million (ppm) of water. This is a very stringent standard. It represents a contamination level of just 0.02%. This is the level of purity demanded by modern engines.

IPU's FiltaSorb elements do more than meet the standard. They meet the standard quickly and then go on to exceed it.

Meeting the standard fast

The fuel in the test data started with a water content of over 800ppm, more than four times the permissible limit.

Within 8 minutes, FiltaSorb media had brought the fuel 'in spec', bringing water content down to under 200ppm.

Exceeding the standard

FiltaSorb does not stop at merely meeting standards. Water is a contaminant in any quantity. Removing it improves engine reliability.

Within 30 minutes of starting the test, water content was brought under 100ppm, twice as dry as the standard demands.

FULL PRODUCT LISTING

Code	Type	Efficiency	Micron	Size	Reusability
Y-2559	FiltaMesh	80%	10	1	Recleanable
Y-2523	FiltaMesh	80%	10	2	Recleanable
Y-1318	FiltaMesh	80%	20	1	Recleanable
Y-1238	FiltaMesh	80%	20	2	Recleanable
T-19HE001-1GYEP	FiltaSolid	90%	1	1	Disposable
T-19HE001-2GYEP	FiltaSolid	90%	1	2	Disposable
T-19HE005-1GYEP	FiltaSolid	90%	5	1	Disposable
T-19HE005-2GYEP	FiltaSolid	90%	5	2	Disposable
T-19NM050-2GYEP	FiltaSolid	80%	50	2	Recleanable
T-19NM100-1GYEP	FiltaSolid	80%	100	1	Recleanable
T-19NM100-2GYEP	FiltaSolid	80%	100	2	Recleanable
T-19NM200-1GYEP	FiltaSolid	80%	200	1	Recleanable
T-19NM200-2GYEP	FiltaSolid	80%	200	2	Recleanable
T-19NM300-2GYEP	FiltaSolid	80%	300	2	Recleanable
T-19NM400-1GYEP	FiltaSolid	80%	400	1	Recleanable
T-19NM400-2GYEP	FiltaSolid	80%	400	2	Recleanable
T-19NM600-2GYEP	FiltaSolid	80%	600	2	Recleanable
T-19NM800-1GYEP	FiltaSolid	80%	800	1	Recleanable
T-19NM800-2GYEP	FiltaSolid	80%	800	2	Recleanable
T-19PP001-1GYEP	FiltaSolid	80%	1	1	Disposable
T-19PP001-2GYEP	FiltaSolid	80%	1	2	Disposable
T-19PP005-1GYEP	FiltaSolid	80%	5	1	Disposable
T-19PP005-2GYEP	FiltaSolid	80%	5	2	Disposable
T-19PP010-1GYEP	FiltaSolid	80%	10	1	Disposable
T-19PP010-2GYEP	FiltaSolid	80%	10	2	Disposable
T-19PP025-1GYEP	FiltaSolid	80%	25	1	Disposable
T-19PP025-2GYEP	FiltaSolid	80%	25	2	Disposable
T-19PP050-1GYEP	FiltaSolid	80%	50	1	Disposable
T-19PP050-2GYEP	FiltaSolid	80%	50	2	Disposable
T-19PP100-1GYEP	FiltaSolid	80%	100	1	Disposable
T-19PP100-2GYEP	FiltaSolid	80%	100	2	Disposable
T-19PP200-2GYEP	FiltaSolid	80%	200	2	Disposable
T-CE-01-Z01	FiltaSolid	99.9%	1	1	Disposable
T-CE-02-Z01	FiltaSolid	99.9%	1	2	Disposable
Y-2689	FiltaSolid	99.9%	1	9	Disposable
Y-2690	FiltaSolid	99.9%	3	9	Disposable
Y-2691	FiltaSolid	99.9%	5	9	Disposable
Y-2692	FiltaSolid	99.9%	10	9	Disposable
Y-2693	FiltaSolid	99.9%	25	9	Disposable
T-FA-01-002	FiltaSorb	80%	1	1	Disposable
T-FA-02-002	FiltaSorb	80%	1	2	Disposable



THE COMPANY YOU WANT TO DO BUSINESS WITH

IPU helps businesses reach the profitability and efficiency they seek.

For nearly sixty years, we have delivered the expert assistance and customer service that lets our domestic and international customers excel in their industries.

We support businesses in sectors including power-generation, oil & gas, marine, IT & telecoms, manufacturing and government.

Our industry experience, competitive pricing and superb support let us evolve from a regular supplier to become the company our customers *want* to do business with.



For further details, please visit:

IPU.CO.UK/FUEL

For more information, please contact:

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