

FAST & EFFECTIVE POLISHING FOR THE MOST CHALLENGING SCENARIOS

The perfect polisher for tackling large tanks and heavy contamination.

The Diesel Defence DDF6 is built to address the most severe contamination in large storage tanks. With a flow rate of 500lpm (litres per minute) it is capable of cleaning 100,000 litre tanks and larger.

The DDF6's three-stage filtration system removes water, particulate and microbial contamination. Its twin banks of three filters can be fitted with a variety of FiltaSorb and FiltaSolid filter elements to focus on water or solid contaminants or, more commonly, a combination of the two.

Monitoring and maintenance can be simplified by integrating the DDF6 with a site's existing Building Management Systems (BMS).

Its adaptable scheduling and reporting functions can be controlled through a simple touch-screen control panel or by connecting a laptop computer.



DIESEL DEFENCE
Fuel Polishing



Exceptional flow rates

The DDF6 delivers a powerful throughput of 500lpm, removing contaminants in a single pass to ensure your fuel is clean and on spec.

Three-stage filtration

With three-stage filtration, the DDF6 removes 100% free water and 99% entrained water from diesel fuel.

ISO 4406 & EN 590 standards

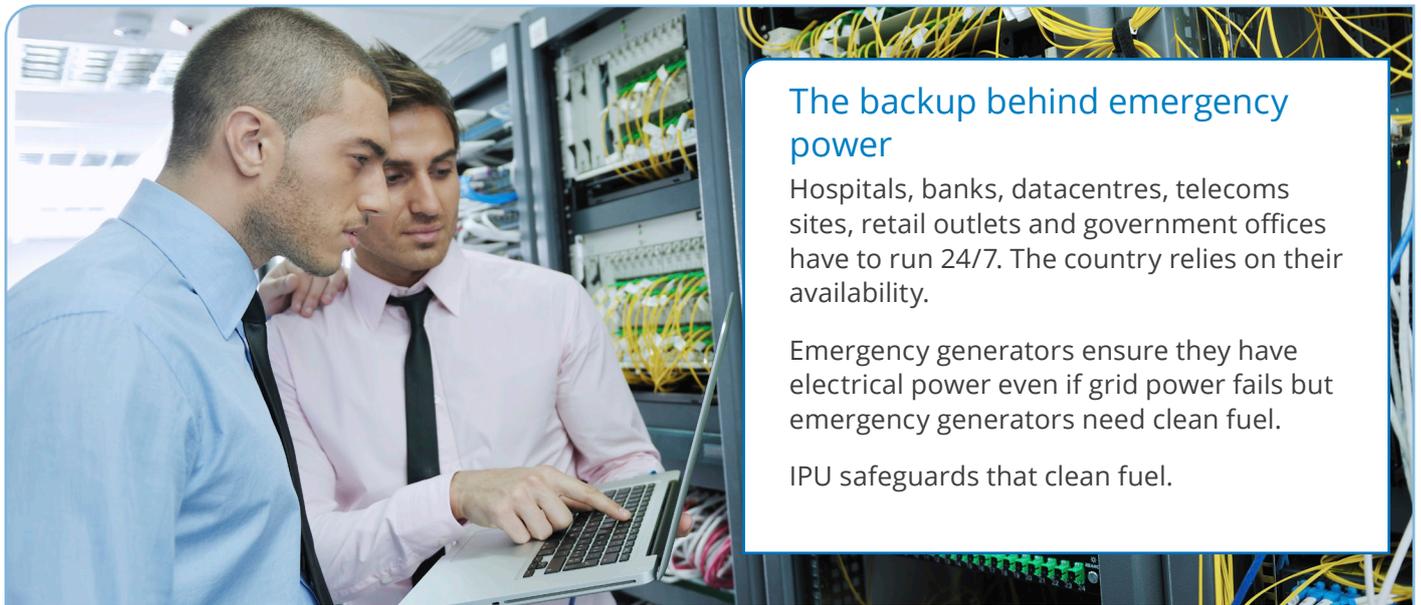
High performance filter elements ensure your fuel meets or exceeds the internationally-mandated 18/16/13 and 200ppm standards.

Let's talk

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CRITICAL POWER NEEDS CLEAN FUEL

A site's power generation infrastructure includes redundant hardware to reduce the chance of a critical failure. Most designs risk disaster by failing to treat their shared fuel stock as a single point of failure.



The backup behind emergency power

Hospitals, banks, datacentres, telecoms sites, retail outlets and government offices have to run 24/7. The country relies on their availability.

Emergency generators ensure they have electrical power even if grid power fails but emergency generators need clean fuel.

IPU safeguards that clean fuel.

One less problem to fix

IPU helps you meet your business objectives. You do not want to be worried about contaminated fuel or unreliable power. Let IPU remove one weakness in your power infrastructure so you can concentrate on what makes your business a success.

Professional service

IPU's services range from supplying an economical and standard fuel polishing system to manufacturing a bespoke unit to suit your site, staff and environment. These services can include:

- Site survey.
- Consultancy with site stake-holders.
- Physical, electrical and mechanical assessment.
- Detailed general assembly (GA) drawings.

Fuel management professionals

IPU are a single-source provider for all aspects for fuel management and maintenance:

- On-site or lab-based fuel testing.
- Fuel cleaning or replenishment.
- Mobile and fixed fuel polishing units.
- Out-sourced fuel management service.

Engine and fuel suppliers

Engine manufacturers and fuel suppliers have tightened their approach to fuel contamination.

Standard warranties on all major engine brands exclude damage caused by contaminated fuel. This damage can be deep within the engine on components such as fuel injectors. It is inevitably expensive to repair and the cost falls on the operator - you.

Fuel suppliers advise any organisation storing fuel to employ appropriate measures to maintain the condition of their fuel. These measures include a fuel polishing system.

PRODUCT HIGHLIGHTS

High flow rate pump



The DDF6 uses an ultra-reliable self-priming centrifugal pump that achieves remarkably high flow rates of up to 500lpm (litres per minute).

A self-priming pump draws fuel from your storage tank even when the connecting pipes start empty. It eliminates the inconvenient and awkward process of 'wetting' the pump.

The maximum suction lift of the pump is 6 meters. Its power gives users the flexibility to site the polisher some distance from the tank itself.

Three-stage filtration



The DDF6 uses three-stage filtration which ensures that most contaminants can be removed effectively in a single pass.

The DDM6 is equipped with six filter housings. When fitted with FiltaSorb media, these remove all free water and 99.9% of entrained water to 100ppm (parts per million) or less.

The unit has differential pressure gauges for each filter housing that give an indication of the filter condition via a green, yellow and red visuals.

Simple control



The DDF6's push-button control panel uses clear labels that any service engineer or technician can understand. No specialist expertise is required.

The control panel includes alarm and status indicators to alert operators to conditions such as 'no flow', 'filter change' or 'bund alarm'.

The unit can be rapidly reset, turned off and on or switched into manual mode.

* A touch-screen option is also available.

Additional options

A full range of additional options are available on the DDF6, including:

- DieselCheck portable diesel analyser.
- Touch-screen control panel.
- Fluid sampling points.
- Telemetry for remote access and reporting.
- Flow meters.

RELATED PRODUCTS

FiltaSolid



FiltaSolid filter elements remove particulates from your fuel. The 800, 900 and 999 series offer 80.0%, 90.0% and 99.9% efficiency on particles between 1 and 800µm (microns).

FiltaSorb



FiltaSorb filter elements deliver unbeatable absorption performance in water absorption. FiltaSorb cells also remove solid particulates down to 1µm (micron).

DieselCheck



The DieselCheck portable diesel analyser quickly, accurately and economically checks a sample's water and particulate content and fuel density.

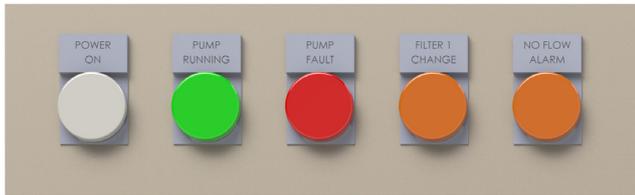
DDM6



The DDM6 is the mobile equivalent to the DDF6. Using the same staged filtration principle with similarly high flow rates, it is wheel-mounted for servicing multiple tanks.

OPTIONS

Enhanced Alarms



A standard DDF6 has two status indicators: 'system running' and 'alert'. Optional alert indicators such as 'no flow', 'filter change' and 'bund alarm' can help operators quickly identify the specific nature of a fault.

Touch-screen



The DDF6's optional touch-screen control panel makes easy work of advanced functions such as scheduling and reporting.

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 ISO 4406 and EN590; no man-entry was required.

www.ipu.co.uk/case1002



IMPECCABLE DESIGN GENERATES SUPERIOR PERFORMANCE

IPU's high-performance fuel polishing units have evolved through years of real world use. Our impeccable design and manufacturing processes deliver superior results for our customers.

Integrated components

IPU's Diesel Defence range are integrated systems. Each component is designed or selected to work harmoniously with the rest of the unit.

Our pumps, for example, are selected to deliver a flow rate that produces optimum performance from our FiltaSorb and FiltaSolid filter elements.

Adhering to standards

Diesel Defence fuel polishers bring your stored fuel into specification with international standards.

Particulates are removed so fuel exceeds the 18/16/13 cleanliness standard specified by ISO4406:2017.

Water is extracted from fuel to below the 200ppm (parts per million) level mandated by EN590.

Search our website (www.ipu.co.uk) for "ISO 4406" and "EN 590" for more details on fuel cleanliness standards.

SPECIFICATIONS

	DDF6
PERFORMANCE	
Flow rate ¹ (lpm)	Up to 500lpm
Indicative tank size (l)	100,000+
Filtration Efficiency (max.)	99.9%
Particulate Removal (min) (µm)	1

BASIC SPECIFICATIONS	
Filter housing(s)	6
Filter size and type	Size 2
Enclosure	None / GRP
Control System	Push-Button / Touch-Screen
Pump Type	Self Priming Centrifugal or as specified
Maximum system pressure (bar)	3
Remote Emergency Stop	Yes (with Enclosure Version)
Differential Pressure Indicator	Electrical x6
Float Switch	Yes

Notes

- Flow rates are maximum rates. Fuel cleanliness, fuel viscosity, distance and other conditions may affect actual performance in the field. Please contact IPU to ensure we offer the correct unit for your application.

SPECIFICATIONS

DDF6

ELECTRICAL

Voltage (V)	415
Frequency (Hz)	50

ENVIRONMENTAL

Noise Level (dBA @ 1m)	< 85
Operating Temperature (°C)	0 to 50°C
Environmental Protection	IP66

PHYSICAL

Size (hwd) (mm)	1457 x 2270 x 1193
Dry weight (kg)	614

PIPEWORK & CONNECTIVITY

Inlet Connections	2" BSP
Outlet Connections	2" BSP
BMS Output	Yes



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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