

WASP Fuel Polishing System Catalogue



WASP PFS

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**MADE IN
BRITAIN**





WHO ARE WASP?

A critical power equipment supplier

Industries

- > Facilities Management
- > Military and Government
- > Healthcare
- > Data Centres
- > Transport
- > Telecommunication
- > Banking
- > Marine
- > Military

Product Ranges

- > Diesel fuel polishing systems (this catalogue)
- > Separ fuel filter/water separators
- > Simplex and duplex fuel filters
- > Automotive / agriculture filters
- > Air / oil / water / fuel / hydraulic filters
- > Sidestream filtration
- > Valve control systems
- > Rail industry filtration and power products
- > Custom build units

Our vision is to use our expertise, knowledge, and heritage to help the industry learn about the technologies we develop, specifically to ensure business continuity and sustainability. We will continue to supply high-class customised systems to the industry and aim to develop our unrivalled technology even further, to create even better technologies for maintaining efficient power continuity.

Our aim is to provide the solutions to a universal problem. To use the latest technology and expertise to innovate, design and build premium systems, aimed at protecting customers' assets and their reputation from power problems.

Values

We value honesty and integrity. Customers rely on us to supply them with the right system every time, helping them to reduce their costs and increase their efficiency. We value expertise and experience, reliable software / hardware, unrivalled technology and customisation, high-class immediate response technical support, and extended customer service.

Sustainability

We feel so strongly about sustainability, we have designed and manufactured unique breakthrough technology and products, that provide excellent value by significantly reducing customers' emissions and energy waste.

Ultimately, customers who purchase from us are not just saving themselves significant costs, but they are helping to save the planet.

With over 35 years' experience, WASP are the pioneers of the fuel polishing industry.

We are constantly testing and innovating new media as well as being ISO9001:2015 certified, which makes us the obvious choice for getting quality built products and service.

Our systems are better developed, faster, more efficient and have significantly more functionality than any other in the market today.

What makes us unique is by **designing and building our own systems**, we have the **flexibility and expertise** to design and manufacture products specific to your **budget, requirements,** and **specifications**.

WHAT IS FUEL POLISHING?

When you rely on uninterrupted backup power in case of a mains power failure, an engine for your truck, yacht, bus or tractor, or whatever you need your diesel / EN590 / HVO / Biodiesel fuel for, it is essential the stored fuel to power your generator remains clean to prevent complete power failure.

The results of complete power failure depend on the industry. It could for example be a cost of millions of pounds in a data centre, a loss of all chilled food stored in a supermarket, power failure on a marine vessel or devastatingly a cost of lives in a hospital.



Fuel could be stored for months to years without being used. In that time, fuel can become contaminated with the likes of water and bacteria, resulting in engine failure or damage.

In the case of a critical power supply, when a power cut does happen, the backup system fails to work leaving a complete loss of power and possibly devastating consequences.

Marine vessels or boats can also be affected when refuelling in countries without strict fuel specifications. Any water or contamination in the fuel can cause engine issues.

Taking poor quality fuel and cleaning / preserving it. Fuel polishing is the technological cleaning process which removes water and particulates from diesel / HVO fuel which is stored for the medium to long term.

Platinum

The **W-HL range**, specifically designed for high lift (underground) tank applications. 2 micron abs, self-priming units.

Gold

The **W-PFS Premium range** which remove contamination and both free and emulsified water to 2 micron abs. Controlled with an interactive touch screen, BMS connectivity and have a large catalogue of “add-ons” available.

This process keeps the fuel at optimum condition and helps prevent fuel related engine and generator failures.

There are many different stages in the fuel polishing process which follow one after the other in a specific sequence. This ensures the water, sludge, sediment, bacteria and other contaminate is removed from the fuel.

A single fuel polishing system can maintain fuel quality, protecting your engine / generator from fuel related breakdowns and making the system more efficient through the removal of impurities.

The unit can communicate its progress, status, and history with you via the touch screen, the built in BMS volt free communication, Ethernet screen sharing, RS485 and via the reporting / export function. Further communication options allow for Modbus, Profibus, BACnet, CANbus and other field bus protocols as well.

We have four fuel polishing ranges, plus we can custom-build units as well.

Silver

The **WB Classic range** which removes contamination and free water to 10 micron. An ideal entry level system to suit basic cleaning needs and budget. Ranging from 10 to 40 litres per minute, all WASP WB systems have the same key features in common. Simplicity, ease of use and a precise efficient functionality are vital.

Bronze

The **W10AC range** for smaller tanks, day tanks and for remote sites where simplicity is required, whilst maintaining a thorough fuel clean.

Good fuel housekeeping is critical to the success of your facility/vehicle/vessel. Without fuel in optimum condition, you are open to potential engine failure.

There are three key functions of a fuel polishing system:

1	System recovery	Cleaning of the fuel in the tank; returning it to a useable state and maintaining EN590 level pass levels for particulate and water.
2	System maintenance	Fuel optimisation, maintaining the quality and ensuring it is ready for use when called on.
3	Analytics	Collating of internal and external data from the system, its sensors, and any external connections to provide a picture of fuel and system efficiency over time.

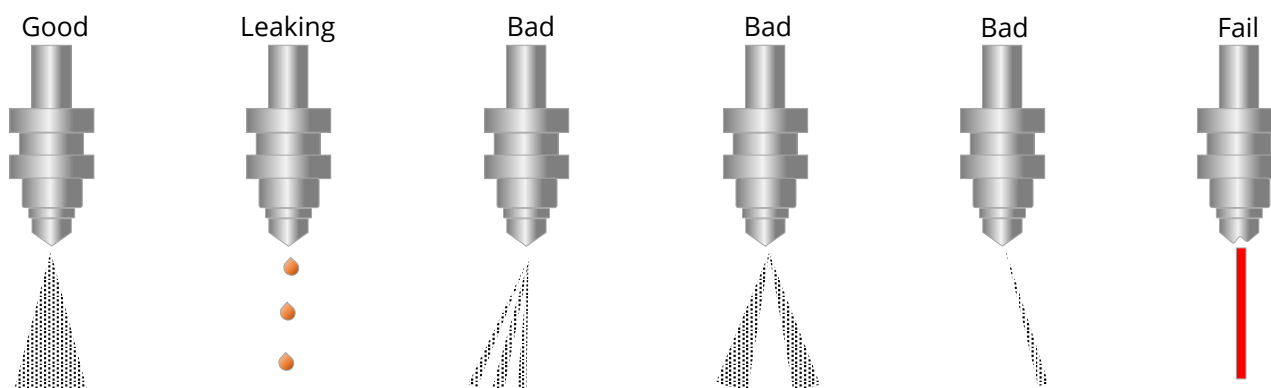




We clean poor quality diesel into usable, clear, bright, fuel



By removing the contamination which can and will cause fuel breakdowns, your fuel system, generator, engine, and power are all protected. Fuel polishing also has the advantage of maintaining your fuel quality, preventing premature fuel degradation, protecting your filter systems, and protecting your engine from poor quality fuel issues, for example injector damage. Which causes inefficiencies or even failures which will stop an engine or generator from working all together.



How Does It Work?

By removing the bacterial content and neutralising any residual micro-fine particles, the infection simply cannot return; thus ensuring WASP Fuel Polishing Systems are not only the most effective way of maintaining fuel quality, but are environmentally friendly too, as no chemicals or biocides are used in this process.





Level		Platinum	Gold	Silver	Bronze
Range		W-HL	W-PFS	WB	W10AC/DC
Installation Type	Target markets and locations	Underground tanks, high technology industries	Data Centres, Hospitals, critical industries	Entry Level, budget conscious, day tanks	Day Tanks
Tank Sizes		Up to 250,000 litres	Up to 500,000 litres	Up to 50,000 litres	Up to 5,000 litres
Power Options		220V 50Hz or 110V 60Hz AC	12V or 24V DC 110V or 220V AC	12V or 24V DC 110V or 220V AC	12V or 24V DC 110V or 220V AC
Final Clean	EN590 calls for below 4 micron	2 micron absolute (0.5 mic nom)	2 micron absolute (0.5 mic nom)	10 micron (option for 3 mic)	6 micron (option for 3 mic)
Filtration Technology		Particulate separation, coalescing and ultra-fine filtration	Centrifugal cleaning coalescing, ultra-fine filtration	Centrifugal cleaning, fine filtration	Coalescing and fine filtration
Free Water Removal	EN590 calls for below 200ppm	Yes 99.6% in a single pass	Yes 99.6% in a single pass	Yes 99.2% in a single pass	Yes 99.4% in a single pass
Emulsified Water Removal		Yes 99.1% in a single pass	Yes 99.1% in a single pass	-	Yes 97% in a single pass
Control		Touch screen	Touch screen	Button/Lamp	Button/Lamp
BMS Connections		Ethernet screen sharing, Volt Free communication, RS485	Ethernet screen sharing, Volt Free communication, RS485	Volt Free communication	Volt Free communication
Reporting Functions	Collect live and historic data on all machine functions and fuel quality	Yes	Yes	-	-
Optional Features					
Multiple tank cleaning	One polishing system can clean 2, 3 4 or 5 tanks	Y	Y	-	-
Multiple tank cleaning	One WB polishing system can clean 2 or 3 tanks	-	-	Y	-
Particulate Monitoring	Accurate measure fuel cleanliness	Y	Y	-	-
Fieldbus Communications	Building management languages including Modbus, Profibus, BACnet, CANbus and more	Y	Y	-	-
Cloud Connectivity	Internet monitoring, with expansion for external devices and remote servicing	Y	Y	-	-
Auto-water drain	Ejection of water	Y	Y	-	-
Automatic Self-Priming after servicing	For initial setup and post servicing	Built in	Y	Y	-
Chemical Dosing	Adding fuel additives	Y	Y	-	-
Stainless steel drip tray		Y	Y	Y	-
Weatherproof Stainless-Steel enclosure	Includes leak detection, frost protection heater and ventilation	Y	Y (up to W-PFS-060)	-	-
Weatherproof Mild-Steel enclosure	Includes leak detection, frost protection heater and ventilation	Y	Y (up to W-PFS-060)	-	-
Weatherproof Mild Steel Enclosure		-	-	Y (up to WB-40)	-
Stainless Steel Frame	Floor mounting option	Y	Y	Y	-
Galvanised Steel Frame	Floor mounting option	Y	Y	Y	-
3 micron final stage filter	Spin-on filter after main unit	-	-	Y	-



W-HL060 - Platinum Range

High Lift capacity Diesel fuel cleaning system. Up to 70 lit/min fuel polishing system, nominal flow rate 60 lit/min, cleaning fuel to 2 micron abs (0.5 mic nom), removing both free and emulsified water, bacteria and particulate.

- > For tanks up to 125,000 litres (contact us for larger sizes)
- > 99.9 % free water removal in a single pass
- > 99 % emulsified water removal in a single pass
- > 2 micron absolute final polish / fuel cleaning (0.5mic nominal)
- > Integrated Fuel Flow Indicator

Part Number	W-HL060W-220	W-HL060F-220	W-HL060W-110	W-HL060F-110
Fuel Flow Rate (max)	70 lit/min (18.5 US gal/min)			
Control	Touch screen			
BMS connections	2 inputs, 7 volt free outputs; RS485, Ethernet sharing			
Power	220V 50Hz 1ph 3A (0.6kW)		110V 50Hz 1ph 6A (0.6kW)	
Lift	6-7m vertical (requires non return valve)			
Ports	1.5" BSP-P		1.5" NPT	
Pump Type	Sliding vane (positive displacement)			
Mounting	Wall	Frame	Wall	Frame

Options	Multi Tank Cleaning Modbus / Fieldbus* Chemical Dosing Particulate Counter Stainless-Steel Frame	Enclosure (Stainless-Steel) Automatic Water Drain 0.5 mic abs Filtration Drip Tray Galvanised Steel Frame
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Wall mounted dimensions
1500mm / 39in wide
1000mm / 59in tall
400mm / 16in deep
400mm required above for servicing

Weight 85kg / 190lbs (wall mount)
Weight 135kg / 300lbs (Frame mount)
All weights / dims are approximate

* Other fieldbus connections are available

W-HL120 - Platinum Range

High Lift capacity Diesel fuel cleaning system. Up to 140 lit/min fuel polishing system, nominal flow rate 120 lit/min, cleaning fuel to 2 micron abs (0.5 mic nom), removing free and emulsified water, bacteria and particulate.

- > For tanks up to 2500,000 litres (contact us for larger sizes)
- > 99.9 % free water removal in a single pass
- > 99 % emulsified water removal in a single pass
- > 2 micron absolute final polish / fuel cleaning (0.5mic nominal)
- > Integrated Fuel Flow Indicator

Part Number	W-HL120W-220	W-HL120F-220	W-HL120W-110	W-HL120F-110
Fuel Flow Rate (max)	140 lit/min (37 US gal/min)			
Control	Touch screen			
BMS connections	2 inputs, 7 volt free outputs; RS485, Ethernet sharing			
Power	220V 50Hz 1ph 6A (1.3kW)		110V 50Hz 1ph 12A (1.3kW)	
Lift	6-7m vertical (requires non return valve)			
Ports	2" BSP-P		2" NPT	
Pump Type	Sliding vane (positive displacement)			
Mounting	Wall	Frame	Wall	Frame

Options	Multi Tank Cleaning Modbus / Fieldbus* Chemical Dosing Particulate Counter Stainless-Steel Frame	Automatic Water Drain 0.5 mic abs Filtration Drip Tray Galvanised Steel Frame
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Wall mounted dimensions
1600x1400x500mm / 63in x 55in x 20in hwd
Frame mounted dimensions (above)
1600x1200x800mm / 63in x 47in x 32in hwd
400mm required above for servicing

Weight 180kg / 400lbs (wall mount)
Weight 250kg / 550lbs (Frame mount)
All weights / dims are approximate

* Other fieldbus connections are available





W-PFS-008 - Gold Range

Up to 8 lit/min diesel fuel polishing system, cleaning fuel to 2 micron abs (0.5 mic nom), removing both free and emulsified water, bacteria and particulate. DC powered only.

- > For tanks up to 10,000 litres
- > 99.9 % free water removal in a single pass
- > 99 % emulsified water removal in a single pass
- > 2 micron absolute final polish / fuel cleaning (0.5mic nominal)
- > Diesel / EN590 / HVO / Biodiesel and similar

Part Number	W-PFS-008-W-24Vdc (12V dc available on request)
Fuel Flow Rate (max)	Up to 8 lit/min (2.1 US gal/min)
Control	Touch screen
BMS connections	2 inputs, 7 volt free outputs; RS485, Ethernet sharing
Power	24V DC, fuse at 3A (0.25kW)
Lift	1.5m vertical, up to 5m with non-return valve
Ports	¾" BSP-P male (¾" NPT available on request)
Pump Type	PTFE Gear (positive displacement)
Mounting	Wall (options for frame, portable and enclosure)

Options	Multi Tank Cleaning	Enclosure (Stainless-Steel)
	Modbus / Fieldbus*	Enclosure (Mild Steel)
	Chemical Dosing	Automatic Water Drain
	Particulate Counter	0.5 mic abs Filtration
	Portable (c/w hoses)	Drip Tray
	Stainless-Steel Frame	Galvanised Steel Frame



Wall mounted dimensions
700mm / 27.5in wide
700mm / 27.5in tall
250mm / 10in deep
300mm required above for servicing
Weight 18kg / 39lbs (wall mount)

All weights / dims are approximate
Enclosure option 900 x 800 x 400mm, 51kg
Portable option 1100 x 800 x 600mm, 27kg

* Other fieldbus connections are available

W-PFS-010 - Gold Range

Up to 10 lit/min fuel polishing system, cleaning fuel to 2 micron abs (0.5 mic nom), removing both free and emulsified water, bacteria and particulate. AC powered only.

- > For tanks up to 12,500 litres
- > 99.9 % free water removal in a single pass
- > 99 % emulsified water removal in a single pass
- > 2 micron absolute final polish / fuel cleaning (0.5mic nominal)
- > Diesel / EN590 / HVO / Biodiesel and similar

Part Number	W-PFS-010-W-220Vac	W-PFS-010-W-110Vac
Fuel Flow Rate (max)	10 lit/min (3.1 US gal/min)	
Control	Touch screen	
BMS connections	2 inputs, 7 volt free outputs; RS485, Ethernet sharing	
Power	220V 50Hz 1ph 3A (0.3kW)	110V 50Hz 1ph 6A (0.3kW)
Lift	1.5m vertical, up to 5m with non-return valve	
Ports	¾" BSP-P	¾" NPT
Pump Type	PTFE Gear (positive displacement)	
Mounting	Wall (options for frame, portable and enclosure)	

Options	Multi Tank Cleaning	Enclosure (Stainless-Steel)
	Modbus / Fieldbus*	Enclosure (Mild Steel)
	Chemical Dosing	Automatic Water Drain
	Particulate Counter	0.5 mic abs Filtration
	Portable (c/w hoses)	Drip Tray
	Stainless-Steel Frame	Galvanised Steel Frame



Wall mounted dimensions
700mm / 27.5in wide
700mm / 27.5in tall
350mm / 14in deep
400mm required above for servicing
Weight 21kg / 46lbs (wall mount)

Enclosure option 900 x 800 x 400mm, 55kg
Portable option 1100 x 800 x 600mm, 30kg
All weights / dims are approximate

* Other fieldbus connections are available





W-PFS-014 - Gold Range

Up to 14 lit/min diesel fuel polishing system, cleaning fuel to 2 micron abs (0.5 mic nom), removing both free and emulsified water, bacteria and particulate. DC powered only.

- > For tanks up to 20,000 litres
- > 99.9 % free water removal in a single pass
- > 99 % emulsified water removal in a single pass
- > 2 micron absolute final polish / fuel cleaning (0.5mic nominal)
- > Diesel / EN590 / HVO / Biodiesel and similar

Part Number	W-PFS-014-W-24Vdc (12V dc available on request)
Fuel Flow Rate (max)	Up to 14 lit/min (3.7 US gal/min)
Control	Touch screen
BMS connections	2 inputs, 7 volt free outputs; RS485, Ethernet sharing
Power	24V DC, fuse at 5A (0.25kW)
Lift	1.5m vertical, up to 5m with non-return valve
Ports	¾" BSP-P male (¾" NPT available on request)
Pump Type	PTFE Gear (positive displacement)
Mounting	Wall (options for frame, portable and enclosure)

Options	Multi Tank Cleaning	Enclosure (Stainless-Steel)
	Modbus / Fieldbus*	Enclosure (Mild Steel)
	Chemical Dosing	Automatic Water Drain
	Particulate Counter	0.5 mic abs Filtration
	Portable (c/w hoses)	Drip Tray
	Stainless-Steel Frame	Galvanised Steel Frame



Wall mounted dimensions
 700mm / 27.5in wide
 700mm / 27.5in tall
 250mm / 10in deep
 300mm required above for servicing
 Weight 19kg / 41lbs (wall mount)

All weights / dims are approximate
 Enclosure option 900 x 800 x 400mm, 52kg
 Portable option 1100 x 800 x 600mm, 28kg

* Other fieldbus connections are available

W-PFS-026 - Gold Range

Up to 26 lit/min fuel polishing system, cleaning fuel to 2 micron abs (0.5 mic nom), removing both free and emulsified water, bacteria and particulate.

- > For tanks up to 30,500 litres
- > 99.9 % free water removal in a single pass
- > 99 % emulsified water removal in a single pass
- > 2 micron absolute final polish / fuel cleaning (0.5mic nominal)
- > Diesel / EN590 / HVO / Biodiesel and similar

Part Number	W-PFS-026-W-220Vac	W-PFS-026-W-110Vac	W-PFS-026-W-24Vdc	12V DC available on request
Fuel Flow Rate (max)	26 lit/min (6.8 US gal/min)			
Control	Touch screen			
BMS connections	2 inputs, 7 volt free outputs; RS485, Ethernet sharing			
Power	220V 50Hz 1ph 3A (0.75kW)	110V 50Hz 1ph 6A (0.75kW)	24V DC 8A (0.3kW)	12V DC on request
Lift	1.5m vertical, up to 5m with non-return valve			
Ports	3/4" BSP-P	3/4" NPT	3/4" BSP-P (3/4" NPT option)	
Pump Type	PTFE Gear (positive displacement)			
Mounting	Wall (options for frame, portable and enclosure)			

Options	Multi Tank Cleaning	Enclosure (Stainless-Steel)
	Modbus / Fieldbus*	Enclosure (Mild Steel)
	Chemical Dosing	Automatic Water Drain
	Particulate Counter	0.5 mic abs Filtration
	Portable (c/w hoses)	Drip Tray
	Stainless-Steel Frame	Galvanised Steel Frame



Wall mounted dimensions
 1000mm / 39in wide
 800mm / 31.5in tall
 300mm / 12in deep
 400mm required above for servicing
 Weight 42kg / 93lbs (wall mount)

Enclosure option 1100 x 1000 x 400mm 75kg
 Portable option 1100 x 800 x 600mm, 41kg
 All weights / dims are approximate

* Other fieldbus connections are available





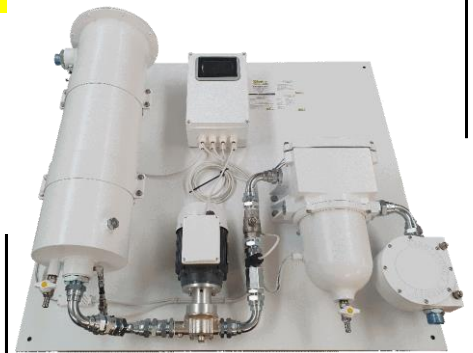
W-PFS-040 - Gold Range

Up to 40 lit/min diesel fuel polishing system, cleaning fuel to 2 micron abs (0.5 mic nom), removing both free and emulsified water, bacteria and particulate.

- > For tanks up to 50,000 litres
- > 99.9 % free water removal in a single pass
- > 99 % emulsified water removal in a single pass
- > 2 micron absolute final polish / fuel cleaning (0.5mic nominal)
- > Diesel / EN590 / HVO / Biodiesel and similar

Part Number	W-PFS-040-W-220Vac	W-PFS-040-W-110Vac
Fuel Flow Rate (max)	Up to 40 lit/min (10.5 US gal/min)	
Control	Touch screen	
BMS connections	2 inputs, 7 volt free outputs; RS485, Ethernet sharing	
Power	220V AC, fuse 5A (0.75kW)	110V AC, fuse 6A (0.75kW)
Lift	1.5m vertical, up to 5m with non-return valve	
Ports	1" BSP-P male (1" NPT available on request)	
Pump Type	PTFE Gear (positive displacement)	
Mounting	Wall (options for frame, portable and enclosure)	

Options	Multi Tank Cleaning	Enclosure (Stainless-Steel)
	Modbus / Fieldbus*	Enclosure (Mild Steel)
	Chemical Dosing	Automatic Water Drain
	Particulate Counter	0.5 mic abs Filtration
	Portable (c/w hoses)	Drip Tray
	Stainless-Steel Frame	Galvanised Steel Frame



Option for white unit shown

Wall mounted dimensions

1000mm / 39in wide
1100mm / 43in tall
400mm / 16in deep
400mm required above for servicing
Weight 65kg / 143lbs (wall mount)

Enclosure option 1100 x 1000 x 400mm, 98kg
Portable option 1100 x 800 x 600mm, 75kg
All weights / dims are approximate

* Other fieldbus connections are available

W-PFS-060 - Gold Range

Up to 60 lit/min fuel polishing system, cleaning fuel to 2 micron abs (0.5 mic nom), removing both free and emulsified water, bacteria and particulate

- > For tanks up to 100,000 litres
- > 99.9 % free water removal in a single pass
- > 99 % emulsified water removal in a single pass
- > 2 micron absolute final polish / fuel cleaning (0.5mic nominal)
- > Diesel / EN590 / HVO / Biodiesel and similar

Part Number	W-PFS-060-W-220Vac	W-PFS-060-W-110Vac
Fuel Flow Rate (max)	Up to 60 lit/min (16 US gal/min)	
Control	Touch screen	
BMS connections	2 inputs, 7 volt free outputs; RS485, Ethernet sharing	
Power	220V AC, fuse 5A (0.6kW)	110V AC, fuse 6A, (0.6kW)
Lift	1.5m vertical, up to 5m with non-return valve	
Ports	1.5" BSP-P male (1.5" NPT available on request)	
Pump Type	Sliding Vane (positive displacement)	
Mounting	Wall (options for frame, portable and enclosure)	

Options	Multi Tank Cleaning	Enclosure (Stainless-Steel)
	Modbus / Fieldbus*	Enclosure (Mild Steel)
	Chemical Dosing	Automatic Water Drain
	Particulate Counter	0.5 mic abs Filtration
	Portable (c/w hoses)	Drip Tray
	Stainless-Steel Frame	Galvanised Steel Frame



Wall mounted dimensions

1000mm / 39in wide
1100mm / 43in tall
400mm / 16in deep
400mm required above for servicing
Weight 75kg / 165lbs (wall mount)

Enclosure option 1100 x 1000 x 400mm 108kg
Portable option 1100 x 800 x 600mm, 85kg
All weights / dims are approximate

* Other fieldbus connections are available





W-PFS-120 - Gold Range

Up to 120 lit/min diesel fuel polishing system, cleaning fuel to 2 micron abs (0.5 mic nom), removing both free and emulsified water, bacteria and particulate.

- > For tanks up to 250,000 litres
- > 99.9 % free water removal in a single pass
- > 99 % emulsified water removal in a single pass
- > 2 micron absolute final polish / fuel cleaning (0.5mic nominal)
- > Diesel / EN590 / HVO / Biodiesel and similar

Part Number	W-PFS-120-F-220Vac	W-PFS-120-F-110Vac
Fuel Flow Rate (max)	Up to 120 lit/min (32 US gal/min)	
Control	Touch screen	
BMS connections	2 inputs, 7 volt free outputs; RS485, Ethernet sharing	
Power	220V AC, fuse 12A (1.4kW)	110V AC, fuse 24A (1.5kW)
Lift	1.5m vertical, up to 2m with non-return valve	
Ports	2" BSP-P male (2" NPT available on request)	
Pump Type	Centrifugal (optional high-lift pump versions available)	
Mounting	Stainless-Steel Frame with drip tray	

Options	Multi Tank Cleaning Modbus / Fieldbus* Chemical Dosing ABS plastic enclosure	Automatic Water Drain 0.5 mic abs Filtration Particulate Counter Galvanised Steel Frame
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1000mm / 39in wide
1800mm / 71in tall
1500mm / 59in deep
400mm required above for servicing

Weight 345kg / 760lbs
All weights / dims are approximate

* Other fieldbus connections are available

W-PFS-240 - Gold Range

Up to 240 lit/min fuel polishing system, cleaning fuel to 2 micron abs (0.5 mic nom), removing both free and emulsified water, bacteria and particulate.

- > For tanks up to 500,000 litres
- > 99.9 % free water removal in a single pass
- > 99 % emulsified water removal in a single pass
- > 2 micron absolute final polish / fuel cleaning (0.5mic nominal)
- > Diesel / EN590 / HVO / Biodiesel and similar

Part Number	W-PFS-240-F-220Vac	W-PFS-240-F-110Vac
Fuel Flow Rate (max)	Up to 240 lit/min (63.5 US gal/min)	
Control	Touch screen	
BMS connections	2 inputs, 7 volt free outputs; RS485, Ethernet sharing	
Power	220V AC, fuse 12A (1.5kW)	110V AC, fuse 24A (1.6kW)
Lift	1.5m vertical, up to 2m with non-return valve	
Ports	2" BSP-P male (2" NPT available on request)	
Pump Type	Centrifugal (optional high-lift pump versions available)	
Mounting	Stainless-Steel Frame with drip tray	

Options	Multi Tank Cleaning Modbus / Fieldbus* Chemical Dosing ABS plastic enclosure	Automatic Water Drain 0.5 mic abs Filtration Particulate Counter Galvanised Steel Frame
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2000mm / 79in wide
1800mm / 71in tall
1500mm / 59in deep
400mm required above for servicing

Weight 550kg / 1212lbs
All weights / dims are approximate

* Other fieldbus connections are available





WB-10 - Silver Range

Up to 10 lit/min fuel polishing system, cleaning fuel to 10 micron, removing free water, bacteria and particulate.

- > For tanks up to 12,500 litres
- > 96 % free water removal in a single pass
- > 10 micron fuel cleaning
- > Manual and automatic modes
- > Diesel / EN590 / HVO / Biodiesel and similar

Part Number	WB-10-12	WB-10-24	WB-10-110	WB-10-220
Fuel Flow Rate (max)	up to 10 lit/min (2.6 US gal/min)			
Control	PLC/Lamp/Button			
BMS outputs	1			
BMS inputs	2			
Power	12V DC 6A (0.15kW)	24V DC 3A (0.2kW)	110V AC 60Hz 8A (0.25kW)	220V AC 50Hz 4A (0.25kW)
Lift	5m max vertical with light spring NRV and priming			
Ports	¾" BSP-P or ¾" NPT			
Pump Type	PTFE Gear (positive displacement)			
Mounting	Wall (options for portable and weather-proof enclosure)			

Options	Enclosure (Mild Steel) 3 micron Final Stage Beacon/Sounder Pre Filter	Portable Drip Tray White Mounting Board
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Wall mounted dimensions
600mm / 23in wide
700mm / 27in tall
240mm / 10in deep

Weight 16kg / 35lbs (wall mount DC)
Weight 19kg / 42lbs (wall mount AC)

Enclosure units 800 x 800 x 400mm, 45kg
Portable units 1200 x 800 x 600mm, 35kg
All weights / dims are approximate

WB-25 - Silver Range

Up to 25 lit/min fuel polishing system, cleaning fuel to 10 micron, removing free water, bacteria and particulate.

- > For tanks up to 30,000 litres
- > 96 % free water removal in a single pass
- > 10 micron fuel cleaning
- > Manual and automatic modes
- > Diesel / EN590 / HVO / Biodiesel and similar

Part Number	WB-25-12	WB-25-24	WB-25-110	WB-25-220
Fuel Flow Rate (max)	up to 25 lit/min (6.6 US gal/min)			
Control	PLC/Lamp/Button			
BMS outputs	1			
BMS inputs	2			
Power	12V DC 10A (0.25kW)	24V DC 5A (0.25kW)	110V AC 60Hz 5A (0.75kW)	220V AC 50Hz 2.5A (0.75kW)
Lift	5m max vertical with light spring NRV and priming			
Ports	1" BSP-P or 1" NPT			
Pump Type	PTFE Gear (positive displacement)			
Mounting	Wall (options for portable and weather-proof enclosure)			

Options	Enclosure (Mild Steel) 3 micron Final Stage Beacon/Sounder Pre Filter	Portable Drip Tray White Mounting Board
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Wall mounted dimensions
700mm / 27in wide
700mm / 27in tall
350mm / 14in deep

Weight 19kg / 41lbs (wall mount DC)
Weight 21kg / 46lbs (wall mount AC)

Enclosure units 800 x 800 x 400mm, 48kg
Portable units 1200 x 800 x 600mm, 38kg
All weights / dims are approximate





WB-40 - Silver Range

Up to 40 lit/min fuel polishing system, cleaning fuel to 10 micron, removing free water, bacteria and particulate.

- > For tanks up to 50,000 litres
- > 96 % free water removal in a single pass
- > 10 micron fuel cleaning
- > Manual and automatic modes
- > Diesel / EN590 / HVO / Biodiesel and similar

Part Number	WB-40-12	WB-40-24	WB-40-110	WB-40-220
Fuel Flow Rate (max)	up to 40 lit/min (10.5 US gal/min)			
Control	PLC/Lamp/Button			
BMS outputs	1			
BMS inputs	2			
Power	12V DC 16A (0.45kW)	24V DC 8A (0.45kW)	110V AC 60Hz 5A (0.75kW)	220V AC 50Hz 2.5A (0.75kW)
Lift	5m max vertical with light spring NRV and priming			
Ports	1" BSP-P or 1" NPT			
Pump Type	PTFE Gear (positive displacement)			
Mounting	Wall (options for portable and weather-proof enclosure)			

Options	Enclosure (Mild Steel) 3 micron Final Stage Beacon/Sounder Pre Filter	Portable Drip Tray White Mounting Board
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Wall mounted dimensions
700mm / 27in wide
700mm / 27in tall
350mm / 14in deep

Weight 26kg / 57lbs (wall mount DC)
Weight 29kg / 64lbs (wall mount AC)

Enclosure units 800 x 800 x 400mm 55kg
Portable units 1200 x 800 x 600mm 45kg
All weights / dims are approximate

WB-120 - Silver Range

Up to 120 lit/min fuel polishing system, cleaning fuel to 10 micron, removing free water, bacteria and particulate.

- > For tanks up to 150,000 litres
- > 96 % free water removal in a single pass
- > 10 micron fuel cleaning
- > Manual and automatic modes
- > Diesel / EN590 / HVO / Biodiesel and similar

Part Number	WB-120-110	WB-120-220
Fuel Flow Rate (max)	up to 120 lit/min (32 US gal/min)	
Control	PLC/Lamp/Button	
BMS outputs	1	
BMS inputs	2	
Power	110V coming soon	220V 50Hz AC 5A (1.3kW)
Lift	5m max vertical with light spring NRV and priming	
Ports	1.5" BSP-P or 1.5" NPT	
Pump Type	Sliding Vane (positive displacement)	
Mounting	Floor mount with integral drip tray	

Options	Beacon/Sounder GRP Enclosure	White Mounting Board
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Note – 3 micron option is not available for this model



Floor mounted dimensions
850mm / 33.5in wide
1400mm / 55in tall
700mm / 27in deep

Weight 80kg / 176lbs

All weights / dims are approximate





W10AC/W10DC – Bronze range

Fuel Polishing, designed for customer re-badging.

- > For tanks up to 10,000 litres
- > 10, 6 or 3 micron fuel cleaning
- > 98% free and emulsified water removal efficiency
- > Option for fuel conditioner and control system
- > Diesel / EN590 / HVO / Biodiesel and similar

Designed with simplicity and customer integration in mind, the W10AC range of fuel polishing systems will meet the entry level for fuel polishing for applications such as small gen-sets, belly tanks, hotels, residential homes, fuel oil stores.

Mounted on either a white or blue base, and ready for customer mounting onto any hard, vertical surface; these systems offer simple yet effective fuel cleaning with control and non-internal control options. Designed to fit into your project both in engineering and in budgetary terms, these systems offer class leading filtration at the entry level of the market.



W10ACMI model shown

Model								Control	Conditioner	Weight*	Size*	Power	ports
W	1	0	A	C	-	-	-	-	-	10kg/22lbs	50 x 30 x 12cm	220VAC 50Hz	¾" BSP/NPT
W	1	0	A	C	I	-	-	Simple	-	11kg/24lbs	60 x 50 x 12cm	220VAC 50Hz	¾" BSP/NPT
W	1	0	A	C	-	M	-	-	Yes	13kg/28lbs	60 x 30 x 12cm	220VAC 50Hz	¾" BSP/NPT
W	1	0	A	C	I	M	-	Simple	Yes	14kg/31lbs	60 x 50 x 12cm	220VAC 50Hz	¾" BSP/NPT
W	1	0	D	C	-	-	12	-	-	10kg/22lbs	50 x 30 x 12cm	12V DC	¾" BSP/NPT
W	1	0	D	C	I	-	12	Simple	-	11kg/24lbs	60 x 50 x 12cm	12V DC	¾" BSP/NPT
W	1	0	D	C	-	M	12	-	Yes	13kg/28lbs	60 x 30 x 12cm	12V DC	¾" BSP/NPT
W	1	0	D	C	I	M	12	Simple	Yes	14kg/31lbs	60 x 50 x 12cm	12V DC	¾" BSP/NPT
W	1	0	D	C	-	-	24	-	-	10kg/22lbs	50 x 30 x 12cm	24V DC	¾" BSP/NPT
W	1	0	D	C	I	-	24	Simple	-	11kg/24lbs	60 x 50 x 12cm	24V DC	¾" BSP/NPT
W	1	0	D	C	-	M	24	-	Yes	13kg/28lbs	60 x 30 x 12cm	24V DC	¾" BSP/NPT
W	1	0	D	C	I	M	24	Simple	Yes	14kg/31lbs	60 x 50 x 12cm	24V DC	¾" BSP/NPT

Intelligence

Magnetic conditioner

Touch screen (future option)

Power option

*approx.

220V AC units – 0.25kW

12V or 24V DC units – 0.2kW

Note – 110V 60Hz units available on request

Base models

Supplied with a switchable pump, to allow for simple on/off control. A clear polymer bowl allows the user to see how much water has been collected and stop the unit when appropriate. Service the filter when full, or every 6 months whichever occurs soonest. Units are supplied with 6-micron elements, unless otherwise specified at the time of ordering.

Suffix I - Simple control system

In addition to the base model, this control unit adds a timer function, manual mode, pump on/off, water in fuel and service filter sensors. The system will start/stop based on its own timer but will stop and indicate a service requirement should one of the sensors trigger via LEDs inside the control box. Reset of alarms is via a power cycle.

Suffix M - Conditioner models

In addition to the base model, conditioner models add the magnetic fuel protection system, aiding the removal of bacterial content and removing ferrous particles (such as rust) from the liquid as it passes through.

For all models, service the filter when full, or every 6 months whichever occurs soonest



W-PFS and W-HL Range Optional Features

We realise each application may have different requirements and have therefore developed a range of “Add-ons” to customise a fuel polishing solution to tick all the boxes.

As we have an in-house team of experienced engineers, we are able to offer solutions which are not covered on the list. If something you require is not listed, please contact us.



WASPNet Cloud Connection (W-PFS and W-HL units only)

Taking the fuel polishing to 4G/Ethernet connectivity, this option allows you to control and monitor your fuel polishing machine and its activity remotely. Custom built dashboards, and map-based geolocation allows for simple pinpointing of problems on remote sites. External equipment can also be added to allow remote monitoring and control of that too.

Stainless-Steel Enclosure (Mild Steel also available) – up to 60 lit/min units

For more prestigious locations and where mounting outside is critical, we offer an optional stainless-steel enclosure. This IP54 enclosure is supplied with thermostatic ventilation, a frost protection heater, and a leak detection system.



Stainless-Steel Mounting Frame (galvanised steel also available)

The W-PFS range is designed to be wall mounted, but the standard and enclosed units can also be supplied with this sturdy stainless-steel frame to allow for simple floor mounting.

Trolley Mounting (portable) for W-PFS range up to 60 lit/min units

Wall mounted systems are designed for use with fixed tanks, however for multiple tanks a portable solution is also available. This option allows you to take your W-PFS range fuel polishing system with you, it is also supplied with 2x 5m of hose to connect to your fuel tank.

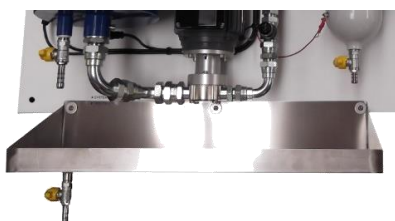


Multi-Tank Changeover (W-PFS and W-HL units only)

The fuel polishing system is designed to process fuel in one tank. However, it is possible to allow it to clean fuel in 2, 3 or more tanks via our automatic change over add-on. This clever integrated technology works with the fuel polishing system to dictate which tank the system will clean autonomously, thus removing the need for engineer system setup and saving the cost of purchasing multiple machines for multiple tanks.

Absolute Polishing (W-PFS and W-HL units only)

If the need is for ultra-fine filtration, we offer 1 micron and 0.5 micron final stage filters. These units, known as Absolute Polishing, remove particulate at unparalleled levels in the market. Removing bacteria at a cellular level and ensuring fuel is clear and bright.



Drip Tray

If your system is installed in a location where spills may occur, this stainless-steel drip tray, mounted to the bottom edge of the system, is an effective and attractive solution to avoid spills.





Dosing System (W-PFS and W-HL units only)

Dosing fuel additives need not be an issue. Why deal with messy or hazardous chemicals when our dosing system can do it for you? Simply select the dosing amount you require and this unit, linked to your fuel polishing system, accurately injects the correct amount of your chosen liquid into the fuel. This is supplied with a stainless-steel tank and a level detect system to warn when the tank is empty.

Particulate Counter (W-PFS and W-HL units only)

ISO4406 particulate counting with in-line monitoring, reporting and storage functions. If you need to know the quality of your fuel, this particulate counter will ensure a record is kept. Built in alarms allow you to set beacons or sounders, or even trigger more fuel polishing if the fuel quality at the sample point drops. There is even an export function to take your reports into excel.



Priming Stage for W-PFS range units only

Priming is vital for any pumped system, and whilst our ranges can assist to a point, we always recognise that priming should be completed as part of the installation process. Sometimes it may be required if the unit and its pipe work has been drained too. To take the work out of priming, we offer this automatic priming solution, which when fitted to the system's output, can be left in situ. Then, priming simply becomes a matter of pressing one button on a manual system. Meanwhile, the fully automatic system will work with the polishing system to gauge if fuel is flowing, if not, it will automatically activate the priming stage until fuel is observed then restart the polishing system.

Modbus BMS And Fieldbus Options (W-PFS and W-HL units only)

W-PFS systems can communicate to fieldbus systems via volt-free contacts, however some sites require additional communication protocols. To assist, we offer a range of compatible systems including Modbus, PROFIBUS, BACnet, CANbus and others. These interfaces take the standard input/output communication system and convert it to a protocol compatible with the customers required BMS system



Automatic Water Drains (W-PFS and W-HL units only)

All systems are provided with internal water/sludge traps which hold the contamination until manual draining can take place. However, some customers may prefer our Automatic Water Drain add-on. This clever system interacts with the main control unit and will autonomously evacuate water from the system when in operation. Its process varies depending on the water trap which requires emptying; however the integrated system will pause the main polishing pump and eject the water from the machine into a container of the customer's choice. Bringing you the benefits of the WASP cleaning process, with minimal operator interaction.



Towing Unit Enclosure (W-PFS and W-HL units only)

Whilst our standard portable solution suits most customers, some may prefer more ruggedised or towable portable units. To serve this requirement, we offer 4-wheel frame mounted units, with an optional towing connection. Such applications include multiple tanks on a large facility where small quad bikes are used to transport the polishing system, or for use in areas where a more resilient unit is needed, such as Africa.



Notes

Flow rates and current draw values will depend on installation details and are quoted as nominal values for reference. Narrow pipework, high lifts / heads and similar mechanical constrictions will affect the machines flow rate and current draw.

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WASP, the market leaders in fuel filtration equipment.

We design, develop and manufacture fuel filtration equipment including innovative, class leading, fuel polishing systems.

Services include fuel testing, consultation, and training.

For more information on the product range, please visit our website www.wasp-pfs.com or email sales@wasp-pfs.com

WASP – for all your fuel cleanliness requirements.

For more information and support for your fuel polishing system, please refer to your WASP Product Manual.

If you require further information, please contact Technical Support at WASP on support@wasp-pfs.com

