



## W-PFS PREMIUM FUEL POLISHING

Product Catalogue

W-PFS Premium Product Range



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E&OE



## INTRODUCTION

When you rely on uninterrupted back up power in case of a mains power failure, an engine for your truck, yacht, bus or tractor, or whatever you need your diesel/EN590 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 UPS (Uninterrupted Power Supply), when a power cut does happen, the backup system fails to work leaving a complete loss of power and possible devastating consequences.

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



## WHAT IS FUEL POLISHING?

Fuel polishing is the technological cleaning process which removes water and particulates from diesel fuel which is stored for the medium to long term.

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.

WASP PFS Ltd have two distinct fuel polishing ranges. Firstly, the W-PFS Premium range which remove contamination and both free and emulsified water to 2 micron. Controlled with an interactive touch screen, BMS connectivity and have a large catalogue of “add-ons” available.

Secondly, 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.



*Right-before fuel polishing, Left- after fuel polishing*





## THE BEST PROTECTION

With over 25 years' experience, WASP PFS Ltd are the pioneers of the fuel polishing industry.

We are constantly testing and innovating new media as well as being ISO9001:2008 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**.



## HOW DOES IT WORK?

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





## WHICH SYSTEM DO I NEED?

If you are new to fuel polishing, trying to decipher which system will best suit your requirements and budget can be quite daunting.

The system you require will vary based on the following factors:

- Tank size and fuel amount
- The speed which it needs to be cleaned
- Power (12v, 24v, 220v)
- Type of generator/engine
- Location of fuel tank i.e. internal or external
- Any of our “Add-On” features

The screenshot shows the WASP Pure Fuel Systems website. The header includes the logo and navigation links: HOME, PRODUCTS, GALLERY & MEDIA, INFO, INTERNATIONAL, COMPANY INFO, CONTACT US, and a highlighted PRODUCT SELECTOR button. Below the header, a breadcrumb trail reads HOME > PRODUCT SELECTOR WIDGET. The main heading is "Product Selector Widget" with the subtext "Select the right system for you".

The widget content includes:

- A title: "Fuel Cleaning Product Selector Widget"
- Introductory text: "Our Brand New Product Selector Widget has been developed to make selecting the right Fuel Cleaning Unit for you quick and easy."
- Instructions: "To use the simple widget, simply select the relevant three variables (Fuel tank size, Power Options and Required Installation) from the drop down options below and click search. The relevant models meeting the specified criteria will be listed."
- Form fields: "10,001 to 30,000 l", "220v AC", and "Portable (ie trolley)" with a "Search" button.
- Contact information: "+44(0)1923606 600 or email: sales@wasp-pfs.com"
- Navigation buttons: "W-PFS Premium Fuel Cleaning", "WB Classic Fuel Cleaning", "Gallery", and "Guide to Fuel Polishing"

We highly recommend using the “Product Selector” tool on our website, [www.wasp-pfs.com](http://www.wasp-pfs.com) as it has been designed to ensure finding your ideal system is as easy as possible.

The infographic is titled "Choosing your ideal system.. is easy as 1, 2, 3" and includes a link "Need help? Contact us". It features three columns:

- CLEANING SPEED**: Represented by a lightning bolt icon, with a range of "From 8 lit/min - 240 lit/min".
- POWER**: Represented by a battery icon, with options "12vDC, 24v DC or 220v AC?".
- ADD-ONS**: Represented by a plus sign icon, with examples "Need a drip tray, multi-tank cleaning, MODBUS, heating, cooling...".



## ADD-ON OPTIONS

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.

The list below covers options for the WB Classic Range only. It is worth noting, the W-PFS Premium Range includes a much larger catalogue of “Add-ons” including: automatic biocide dosing, automatic multiple tank changeovers, particulate counters, automatic priming pumps, automatic water drains, mobile and internet connectivity and Modbus BMS.

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.

### STAINLESS STEEL ENCLOSURE

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.

*Powder coated also available for WB Classic Range*



### STAINLESS STEEL MOUNTING FRAME

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

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.

*Also available for WB Classic Range*



## TOWING UNIT ENCLOSURE

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.



## ABSOLUTE POLISHING

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.

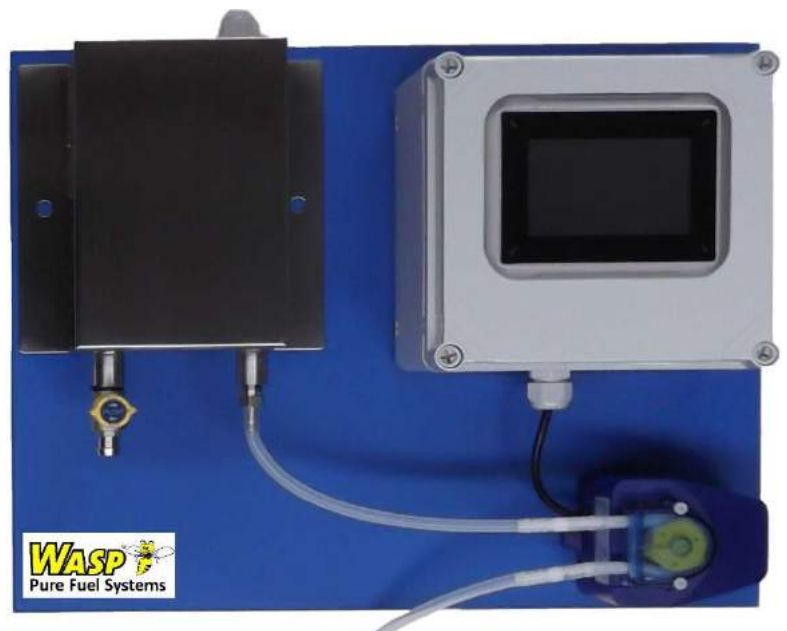


## DRIP TRAY

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

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

**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.



## WASP CONNECT

Connectivity is the modern world, not only do WASP offer BMS connections via volt free contacts, but our **WASP connect** system allows you to remotely control and monitor your touch screen system on external devices. Using desktop sharing or a java enabled web browser, you can then view and interact with the copy of the touch screen as if you were standing in front of your system. W-PFS units are also supplied with volt free contacts for BMS communication as well as RS485 monitoring and control as standard.



## PRIMING STAGE

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 a **manual or 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 FIELD BUS OPTIONS

W-PFS system 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, 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

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.

## MULTI-TANK CHANGEOVER

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.





## W-PFS-008 PREMIUM FUEL CLEANING SYSTEM

**8 litres per minute fuel polishing system, cleaning fuel to 2 micron, removing both free and emulsified water, bacteria and particulate.**

- Advanced, high speed DC system, providing full control system and monitoring
- Manual, Automatic (timer) and BMS control system
- Fuel conditioning stage for anti-bacterial action
- Patented centrifugal removal process
- Recirculation or transfer action
- 99.9 % free water removal in a single pass
- 99 % emulsified water removal in a single pass
- 2 micron final polish/fuel cleaning
- Tank sizes up to 10,000 litres, cleaning 8 lit/min
- Available in 12vDC and 24vDC



Base Model (wall mounted)	W-PFS-008-W-24vdc	W-PFS-008-W-12vdc
Flow rate	up to 8 lit/min	
Recommended tank size	up to 10,000 Litres	
Power options	24v DC	12v DC
Finish options	Wall Mounted, Enclosure, Trolley, Frame mounted, towing unit	
Particulate removal to	2 Micron	
Control unit	Touch screen control	PLC Control
BMS** outputs	6	6
BMS** inputs	2	2
Fuse	3a	5a
Typical current	3a	5a
Suction capability	1.5m vertical lift, over 5m with non-return valve fitted and when primed	
Port sizes	3/4" BSP-P male (60 deg cone)	
Pump body	Steel	
Pump type	PTFE Gear	
Shaft	316 Stainless steel	
Seal	Flouoroelastomer	
Dimensions *	700x700x250mm	
Weight *	18kg approx	



### CLEANING SPEED

8 lit/min - ideal for tank sizes up to 10,000 litres



### POWER

12vDC  
24vDC



### INSTALLATION

Wall Mounted, stair climbing trolley, weather-proof casing, towing unit, frame mounted



### ADD-ONS

Absolute Polishing (to 0.5 micron), auto biocide dosing, WASP Connect (remote control of unit), particulate counter, Auto priming pumps, manual priming pumps, auto water drains, mobile & internet connectivity, drip tray, auto change-over for multiple fuel tanks, ModBus and FieldBus options.

*\* Measurements are for the wall mounted version. Please enquire for measurements for others. \*\*BMS - Building Management System*



## W-PFS-010 PREMIUM FUEL CLEANING SYSTEM

10 litres per minute fuel polishing system, cleaning fuel to 2 micron, removing both free and emulsified water, bacteria and particulate.



- Advanced, high speed DC system, providing full control system and monitoring
- Manual, Automatic (timer) and BMS control system
- Fuel conditioning stage for anti-bacterial action
- Patented centrifugal removal process
- Recirculation or transfer action
- 99.9 % free water removal in a single pass
- 99 % emulsified water removal in a single pass
- 2 micron final polish/fuel cleaning
- Tank sizes up to 12,500 litres
- 10 litres per minute

Base Model (wall mounted)	W-PFS-010-W-220vac
Flow rate	up to 10 lit/min (600 lit/hr)
Recommended tank size	Up to 12,500 litres
Power options	220v 50hz 1ph AC
Finish options	Wall Mounted, Enclosure, Frame, Trolley, Towing Unit
Particulate removal to	2 Micron
Control unit	Touch screen control
BMS outputs	6
BMS inputs	2
Fuse	3a
Typical current	1a
Suction capability	1.5m vertical lift, over 5m with non-return valve fitted and when primed
Port sizes	3/4" BSP-P
Pump body	Steel
Pump type	PTFE Gear
Shaft	316 Stainless steel
Seal	Flouoroelastomer
Dimensions *	700x700x350mm
Weight *	21KG approx



### CLEANING SPEED

10 lit/min - ideal for tank sizes up to 12,500 litres



### POWER

220vAC



### INSTALLATION

Wall Mounted, stair climbing trolley, weather-proof casing, towing unit, frame mounted



### ADD-ONS

Absolute Polishing (to 0.5 micron), auto biocide dosing, WASP Connect (remote control of unit), particulate counter, Auto priming pumps, manual priming pumps, auto water drains, mobile & internet connectivity, drip tray, auto change-over for multiple fuel tanks, ModBus and FieldBus options.

*\* Measurements are for the wall mounted version. Please enquire for measurements for others. \*\*BMS - Building Management System*





## W-PFS-014 PREMIUM FUEL CLEANING SYSTEM

**14 litres per minute fuel polishing system, cleaning fuel to 2 micron, removing both free and emulsified water, bacteria and particulate.**

- Advanced, high speed DC system, providing full control system and monitoring
- Manual, Automatic (timer) and BMS control system
- Fuel conditioning stage for anti-bacterial action, eliminates the build-up of algae and water in your tanks
- Patented centrifugal removal process
- Recirculation or transfer action
- 99.9 % free water removal in a single pass
- 99 % emulsified water removal in a single pass
- 2 micron final polish/fuel cleaning
- Tank sizes 7,500 to 20,000 litres
- 14 litres per minute.
- Available in 12vDC and 24vDC



Base Model (wall mounted)	W-PFS-014-W-24vdc	W-PFS-014-W-12vdc
Flow rate	up to 14 lit/min	
Recommended tank size	7,500 to 20,000 litres	
Power options	24v DC	12v DC
Finish options	Wall Mounted, Enclosure, Trolley, Frame mounted, Towing Unit	
Particulate removal to	2 Micron	
Control unit	Touch screen control	PLC Control
BMS outputs	6	
BMS inputs	2	
Fuse	5a	10a
Typical current	4a	9a
Suction capability	1.5m vertical lift, over 5m with non-return valve fitted and primed	
Port sizes	3/4" BSP-P male (60 deg cone)	
Pump body	Steel	
Pump type	PTFE Gear	
Shaft	316 Stainless steel	
Seal	Flouoroelastomer	
Dimensions *	700x700x250mm	
Weight *	19kg approx	



### CLEANING SPEED

14 lit/min - ideal for tank sizes from 7,500 to 20,000 litres



### POWER

12vDC  
24vDC



### INSTALLATION

Wall Mounted, stair climbing trolley, weather-proof casing, towing unit, frame mounted



### ADD-ONS

Absolute Polishing (to 0.5 micron), auto biocide dosing, WASP Connect (remote control of unit), particulate counter, Auto priming pumps, manual priming pumps, auto water drains, mobile & internet connectivity, drip tray, auto change-over for multiple fuel tanks, ModBus and FieldBus options.

*\* Measurements above are for the wall mounted version. Please enquire for weights and dimensions for alternative finishes.*



# W-PFS-026-W-220-VAC PREMIUM FUEL CLEANING SYSTEM

26 litres per minute fuel polishing system, cleaning fuel to 2 micron, removing both free and emulsified water, bacteria and particulate.

- 220v 50hz 1ph AC system
- Manual, Automatic (timer) and BMS control system
- Fuel conditioning stage for anti-bacterial action
- Patented centrifugal removal process
- Automatic stop on service requirement
- 26 lit/min throughput
- Free and emulsified water removal
- 2 micron final stage
- 1 or 0.5 micron absolute polishing™ optional
- Colour touch screen control



Base Model (wall mounted)	W-PFS-026-W-220VAC	W-PFS-026-W-24vdc	W-PFS-26-W-12vdc
Flow rate	up to 26 lit/min		
Recommended tank size	10,000 to 30,000 litres		
Power options	220v 50hz 1ph AC	24vDC	12vDC
Finish options	Wall mounted, stair climbing trolley, weather-proof casing, towing unit, frame mounted		
Particulate removal to	2 micron		
Control unit	Colour touch screen	PLC with manual/BMS/ Programmable timer	
BMS outputs	6		
BMS inputs	2		
Fuse	3a	8a	15a
Typical current	2.5A approx (at 220v AC)	5a	12a
Suction capability	1.5m vertical lift, over 5m with non-return valve fitted and when primed		
Port sizes	1" BSP-P		
Pump body	Steel		
Pump type	PTFE Gear		
Shaft	Stainless steel		
Seal	Flouoroelastomer		
Dimensions *	1000 x 800 x 300mm		
Weight *	42KG approx		



## CLEANING SPEED

26 lit/min - ideal for tank sizes from 10,000 to 30,000 litres



## POWER

220v AC  
12vDC  
24vDC



## INSTALLATION

Wall Mounted, stair climbing trolley, weather-proof casing, towing unit, frame mounted



## ADD-ONS

Absolute Polishing (to 0.5 micron), auto biocide dosing, WASP Connect (remote control of unit), particulate counter, Auto priming pumps, manual priming pumps, auto water drains, mobile & internet connectivity, drip tray, auto change-over for multiple fuel tanks, ModBus and FieldBus options.

*\* Measurements above are for the wall mounted version. Please enquire for weights and dimensions for alternative finishes.*



## W-PFS-040-W-220VAC PREMIUM FUEL CLEANING SYSTEM

40 litres per minute fuel polishing system, cleaning fuel to 2 micron, removing both free and emulsified water, bacteria and particulate.

- 220v 50hz 1ph AC system
- Manual, Automatic (timer) and BMS control system
- Fuel conditioning stage for anti-bacterial action
- Patented centrifugal removal process
- Automatic stop on service requirement
- 40 lit/min throughput
- Free and emulsified water removal
- 2 micron final stage
- 1 or 0.5 micron absolute polishing™ optional
- Colour touch screen control



Base Model (wall mounted)	W-PFS-040-W-220vac	W-PFS-040-W-24vdc
Flow rate	up to 40 lit/min	
Recommended tank size	25,000 to 50,000 litres	
Power options	220v 50hz 1ph AC	24vDC
Finish options	Wall mounted, stair climbing trolley, weather-proof casing, towing unit	
Particulate removal to	2 Micron	
Control unit	Touch screen control	
BMS outputs	6	
BMS inputs	2	
Fuse	3a	15a
Typical current	2a	11a
Suction capability	1.5m vertical lift, over 5m with non-return valve fitted and when primed	
Port sizes	1" BSP-P	
Pump body	Steel	
Pump type	PTFE Gear	
Shaft	Stainless steel	
Seal	Fluoroelastomer	
Dimensions *	1000 x 1000 x 450mm	
Weight *	61KG approx	65KG



### CLEANING SPEED

40 lit/min - ideal for tank sizes from 25,000 to 50,000 litres



### POWER

220vac  
24vDC



### INSTALLATION

Wall Mounted, trolley mounted, weather-proof casing, towing unit, frame mounted



### ADD-ONS

Absolute Polishing (to 0.5 micron), auto biocide dosing, WASP Connect (remote control of unit), particulate counter, Auto priming pumps, manual priming pumps, auto water drains, mobile & internet connectivity, drip tray, auto change-over for multiple fuel tanks, ModBus and FieldBus options.





## W-PFS-060-W-220VAC PREMIUM FUEL CLEANING SYSTEM

40 litres per minute fuel polishing system, cleaning fuel to 2 micron, removing both free and emulsified water, bacteria and particulate.

- Manual, Automatic (timer) and BMS control system
- Fuel conditioning stage for anti-bacterial action
- Patented centrifugal removal process
- Automatic stop on service requirement
- 60 lit/min throughput
- Free and emulsified water removal
- 2 micron final stage
- 1 or 0.5 micron absolute polishing™ optional
- Colour touch screen control
- 220v 50hz 1ph AC system



<b>Base Model (wall mounted)</b>	<b>W-PFS-060-W-220</b>
<b>Flow rate</b>	60 lit/min
<b>Recommended tank size</b>	Up to 100,000 litres
<b>Power options</b>	220v 50hz 1ph AC
<b>Finish options</b>	Wall Mounted, Enclosure, Frame, trolley mounted, towing unit
<b>Particulate removal to</b>	2 micron
<b>Control unit</b>	Colour touch screen
<b>BMS outputs</b>	6
<b>BMS inputs</b>	2
<b>Fuse</b>	4a
<b>Typical current</b>	3a
<b>Suction capability</b>	1.5m vertical lift, over 5m with non-return valve fitted and when primed
<b>Port sizes</b>	1 ½"
<b>Pump body</b>	Steel
<b>Pump type</b>	PTFE gear
<b>Shaft</b>	Stainless Steel
<b>Seal</b>	Flouoroelastomer
<b>Dimensions *</b>	1100x800x450mm
<b>Weight *</b>	75KG



### CLEANING SPEED

60 lit/min - ideal for tank sizes up to 100,000 litres



### POWER

220v AC



### INSTALLATION

Wall Mounted, trolley mounted, weather-proof casing, towing unit, frame mounted



### ADD-ONS

Absolute Polishing (to 0.5 micron), auto biocide dosing, WASP Connect (remote control of unit), particulate counter, Auto priming pumps, manual priming pumps, auto water drains, mobile & internet connectivity, drip tray, auto change-over for multiple fuel tanks, ModBus and FieldBus options.

*\* Measurements above are for the wall mounted version. Please enquire for weights and dimensions for alternative finishes.*



## W-PFS-120 PREMIUM FUEL CLEANING SYSTEM

These units are all frame mounted, large scale cleaning systems. Designed for large scale industrial use, this range is in use worldwide.

- Manual, Automatic (timer) and BMS control system
  - Fuel conditioning stage for anti-bacterial action
  - Patented centrifugal removal process
  - Recirculation or transfer action
  - Automatic stop on service requirement
  - 99.6 % free water removal (in single pass)
  - 99% emulsified water removal (in single pass)
  - 2 micron fuel cleaning
  - 1 or 0.5 micron absolute polishing™ optional
  - Touch-screen control
  - History trend function and report export option
  - Can be controlled via internet/intranet
- All units are IP55 and are an open steel frame construction



These systems can also be manufactured as enclosed units.

### W-PFS-120

Flow rate	120 lit/min (7200 lit/hr)
Recommended Tank size	Up to 250,000 litres
Power options	220v 50hz 1ph 12a
Finish options	Frame mount (enclosures available as an option)
Particulate removal to	2 Micron
Control unit	Colour Touch Screen
BMS outputs	6
BMS inputs	2
Fuse	5a
Typical current	5a
Suction capability	1.5m vertical lift, over 5m with non-return valve fitted and when primed
Ports	2" BSP-P
Pump body	Stainless Steel
Gears	Stainless steel
Shaft	Stainless steel
Seal	Fluoroelastomer
Dimensions*	1750x1500x1200mm
Weight	245kg approx



#### CLEANING SPEED

120 lit/min - ideal for tank sizes up to 250,000 litres



#### POWER

220v AC



#### INSTALLATION

Frame Mounted



#### ADD-ONS

Absolute Polishing (to 0.5 micron), auto biocide dosing, WASP Connect (remote control of unit), particulate counter, Auto priming pumps, manual priming pumps, auto water drains, mobile & internet connectivity, drip tray, auto change-over for multiple fuel tanks, ModBus and FieldBus options.



## W-PFS-240 PREMIUM FUEL CLEANING SYSTEM

240 litres per minute fuel polishing system, cleaning fuel to 2 micron, removing both free and emulsified water, bacteria and particulate.

- Advanced, high speed DC system, providing full control system and monitoring
- Manual, Automatic (timer) and BMS control system
- Fuel conditioning stage for anti-bacterial action, eliminates the build-up of algae and water in your tanks
- Patented centrifugal removal process
- Recirculation or transfer action
- 99.9 % free water removal in a single pass
- 99 % emulsified water removal in a single pass
- 2 micron final polish/fuel cleaning
- Tank sizes from 175,000 to 500,000 litres
- 240 litres per minute



Base Model (wall mounted)	W-PFS-240-F-220vac
Flow rate	up to 240 lit/min
Recommended tank size	up to 500,000 Litres
Power options	220v 50hz 1ph
Finish options	Frame mount (enclosures available as an option)
Particulate removal to	2 Micron
Control unit	Touch screen control
BMS outputs	6
BMS inputs	2
Fuse	10a
Typical current	9a
Suction capability	5m vertical lift, over 5m with non-return valve fitted and when primed
Port sizes	2" BSP-P male (60 deg cone)
Pump body	Stainless Steel
Pump type	Stainless Steel
Shaft	Stainless Steel
Seal	Flouoroelastomer
Dimensions *	2000 x 1500 x 1800mm
Weight *	450kg approx

\* Measurements are approximate.



### CLEANING SPEED

240 lit/min - ideal for tank sizes up to 500,000 litres



### POWER

220v AC



### INSTALLATION

Frame Mounted



### ADD-ONS

Absolute Polishing (to 0.5 micron), auto biocide dosing, WASP Connect (remote control of unit), particulate counter, Auto priming pumps, manual priming pumps, auto water drains, mobile & internet connectivity, drip tray, auto change-over for multiple fuel tanks, ModBus and FieldBus options.





## CUSTOM BUILT SYSTEMS

Our in-house team of electrical and mechanical engineers have the expertise to custom build systems to your own specific requirements. If our standard range is not quite what you are looking for, please contact us and ask about our custom-built service.

Here are some previous examples:



### FULL REDUNDANCY DUPLEX

The data centre customer who specified this W-PFS-060 requested full redundancy; hence this system has two of each stage, including with two complete distinct filtration paths.

- cleans at 60 litres per minute
- 220v 50hz 1ph powered (drawing roughly 12a)
- mounted in a stainless-steel frame
- automated ball valves, allowing one machine to clean 4 separate fuel tanks
- an integrated water tank
- pressure relief system
- fully monitored, remotely controlled and monitored via BMS with over 25 different sensing points, all monitoring the systems performance and operation
- integrated, monitored drip tray

Installation space was limited onsite, therefore space above the unit was allowed for servicing.



### TIMED AUTOMATIC BIOCIDES DOSING

This W-PFS-060 system was supplied to a Data Centre in Turkey via our Turkish distributor, Evergee. To cope with poor quality fuel, they required all the benefits of a W-PFS system as well as biocide dosing as a preventative measure.



### 10 lit/min W-PFS SYSTEM WITH DOSING

This fuel polishing system complete with the dosing add-on had a requirement of being able to fit in a man hole. Our engineers worked with the customer to ensure the system could easily fit in the given installation area.

### 240 LIT/MIN FRAME MOUNTED UNIT

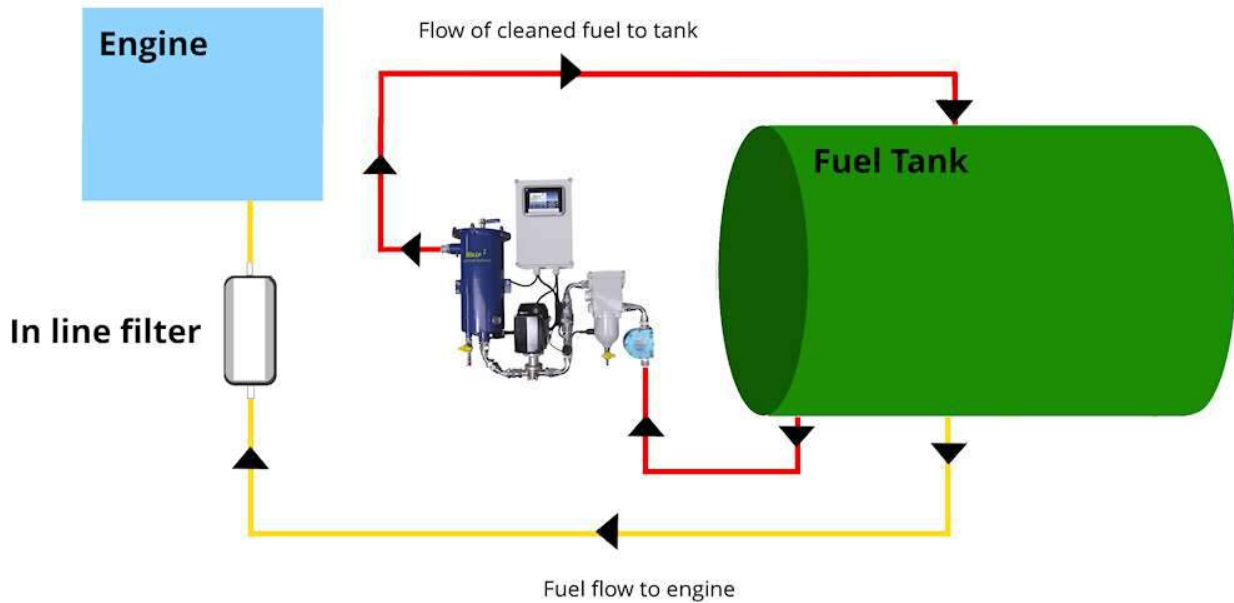
Built for installation at a Data Centre, this large scale polishing system filtered to 5 micron and up to 240 lit/min.



There is a larger collection of custom made systems within the W-PFS Premium Range. To see more examples, go to [www.wasp-pfs.com](http://www.wasp-pfs.com) and view the gallery.



## INSTALLATION GUIDE



- Ensure the system is securely fastened to a wall or other suitable solid structure
- The unit should have unique pipe work, i.e. not the feed to the engine.
- The input to the WASP system should feed from the bottom of the fuel tank (via a ball valve and a foot valve / non-return valve)
- The system should pick-up fuel from the lowest point of the tank at one end, (below the level of the fuel feed to your engine) and ideally return it to the highest point at the opposite end
- In any typical fuel tank, the pipe feeding fuel to the engine is not at the bottom, however to successfully clean fuel, the pickup pipe going to the W-PFS unit should be right at the bottom of the tank, below the engine feed
- The output should return to the tank at the top, ideally the opposite end to the input
- The unit can be controlled via BMS (Building Management System), however it is capable of self operation and monitoring
- System must be primed before use and operation. It must also be primed after servicing; although with the aforementioned foot or non-return valve installed, priming should only need to be done once, after installation
- With power applied, please ensure the system's time and date have been correctly set
- We recommend an internal pipe diameter of 3/4" for the 008/010 models, 1" for the 014/026/040 models, and 1.5" for the 060 units. Larger diameters will assist the unit as this reduces the frictional losses. Small diameters, long pipe runs or many bends in the pipe work will cause high frictional losses and cause the system to run slower than its maximum speed, or in extreme cases cause it to stop. Likewise, high fuel lifts or fuel heads will also cause the unit to run slower,

**WASP PFS ® Ltd - the market leaders in fuel filtration equipment.**

We invent, design and manufacture customised fuel filtration equipment, including innovative fuel polishing systems and absolute polishing products.

Services include fuel testing, consultation and training.

For more information on the product range, please visit the website: [www.wasp-pfs.com](http://www.wasp-pfs.com)

email: [info@wasp-pfs.com](mailto:info@wasp-pfs.com)

**WASP PFS Ltd - For all your fuel cleaning requirements.**

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

If you require further information please contact Technical Support at WASP on 01923 606 600 or email [info@wasp-pfs.com](mailto:info@wasp-pfs.com).



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