

## PDSES

FUEL MAINTENANCE


Diesel fuel begins to degrade with in three weeks from the time it leaves the refinery. The fuel degradation affects the caloric value, causing higher fuel consumption, and exposing the fuel to chemical changes, In addition the new formula of diesel fuel is very low in sulfur and is formulated to reduce emissions during the engine combustion process. Unfortunately, this lack of sulfur causes the diesel fuel to absorb water and fosters the development of algae and other biological growth as well as other elements that damage the fuel.

Furthermore, the engines, and especially their fuel systems, have improved. They are now so sensitive that any contaminants can cause immediate damage to the high pressure pump or the injectors, that are very costly components of the engines. not to mention if the engine failure occurs during emergencies - at a time when the generator support for your electrical system is most critical - the damage caused and the high cost of parts are the least of your problems.

Most companies invest large sums in generators, synchronizing systems, controls, infrastructure and other elements of their backup systems. That large investment is made in order to cover relatively short periods of power outages. Fuel degradation and contamination, however, will cause premature failure of your engines, leaving you without the support you desperately need.

That is why it is so critical to maintain the quality of the fuel in your generators.

PDSES Power's founder began utilizing pro-active fuel maintenance programs in African mines in the early 2000s. That experience in Africa taught us how to adapt the successful use of the altered diesel fuel in the new machines. We spent years experimenting and gathering data about many different engines and the fuel's effect on them.

Today, PDSES Power uses this experience and knowledge to offer you a complete solution for your diesel fuel: a fully automated system that will keep your fuel pristine and ready to use, delivering the highest quality liquid energy to your engine.


## 800 <br> Enclosed Automated Fuel Maintenance Systems



## Benefits

$\checkmark$ Prevents and removes any biological growth
$\checkmark$ Removes water down to 50 ppm
$\checkmark$ Removes solid paritcles down to 1 micron
$\checkmark$ Advanced filter media
$\checkmark$ Fully automated
$\checkmark$ Fuel tanks will no longer require routine cleaning
$\checkmark$ Easy to install and maintain
$\checkmark$ Very low maintenance costs
$\checkmark$ Keeps the fuel additives suspended in the fuel
$\checkmark$ Keeps your diesel fuel clean and fresh for many years

PDSES Power 800 series is designed to support emergency diesel fuel tank up to 7,600 Liters ( 2,000 Gallons) Volume Or small private refuel stations. Can also use as mobile unit

| ITEM | 800 |
| :---: | :---: |
| flow rate LPH/GPM | 800/3.5 |
| primary filter- pdses water separator | KB8514AA with auto drain |
| secondary filter pdses depth filter | KBSDX 1 |
| PLC | PDSES Main programmed controller $7^{\prime \prime}$ touch screen to control all machine sensors and outage communications - Modbus, IP or GPRS (optional) |
| power pack | High quality monoblock gear pump |
| electric motor | FLP Electric Motor $0.75 \mathrm{KW}, 1 \mathrm{HP}, 4$ Pole, 1440 RPM, Foot cum Face Mounted (B34) 415 Volts, $50 \mathrm{~Hz}, 3$ Phase, Class F, IP 55 Frame Size: 80 FLP |
| plumbing | $1 / 2^{\prime \prime}$ SS or metal hoses |
| main cabinet | Heavy duty outdoorcabinet(powder coated or stainless steel) with adjustable foot, and wall mount |
| internal cabinet | IP55 cabinet for all electronic devices, powder coated or stainless Steel |
| dimensions | Metric (mm) :W-850/H-1300/D-380 \| Inch : W-33.4"/H-512"/ D.15" |
| weight | $110 \mathrm{Kg} \mathrm{\mid} 242 \mathrm{Lbs}$ |
| particle removal capability | Down to 1 micron of solid or semi-solid particles |
| water removal capability | Down to 50 PPM of free and dissolved water |

## 1200 Enclosed Automated Fuel Maintenance Systems



## Benefits

$\checkmark$ Prevents and removes any biological growth
$\checkmark$ Removes water down to 50 ppm
$\checkmark$ Removes solid paritcles down to 1 micron
$\checkmark$ Advanced filter media
$\checkmark$ Fully automated
$\checkmark$ Fuel tanks will no longer require routine cleaning
$\checkmark$ Easy to install and maintain
$\checkmark$ Very low maintenance costs
$\checkmark$ Keeps the fuel additives suspended in the fuel
$\checkmark$ Keeps your diesel fuel clean and fresh for many years

PDSES Power 1200 series is designed to support emergency diesel fuel tank up to 10,600 liters ( 2,800 gallons) volume or small private refuel stations. Can also use as mobile unit.

| ITEM | 1200 |
| :---: | :---: |
| flow rate LPH/GPM | 1200/5.3 |
| primary filter-pdses water separator | KB8514AA with auto drain |
| secondary filter- pd ses depth filter | KBSD ${ }^{1}$ |
| PLC | PDSES Main programed controller 7 " Touch screen to control all machine sensors and outage communications - Modbus, IP or GPRS (optional) |
| power pack | High Quality monoblock gear pump |
| electric motor | FLP Electric Motor 0.75 KW, 1HP, 4 Pole, 1440 RPM, Foot cum Face Mounted (B34) 415 Volts, $50 \mathrm{~Hz}, 3$ Phase, Class F, IP 55 Frame Size: 80 FLP |
| plumbing | 1/2" SS Or metal hoses |
| main cabinet | Heavy Duty Outdoor Cabinet Powder Coated OrStainless Steel with Adjustable foot, and wall mount |
| internal cabinet | IP55 cabinet for all electronic devices, Powder coated or Stainless Steel |
| dimensions | Metric (mm) : W-850/H-1300/D-380 \| Inch : W-33.4"/H-51.2" / D-15" |
| weight | 110 Kg I 242 Lbs |
| particle removal capability | Down to 1 Micron of Solid or Sami-Solid particles |
| water removal capability | Down to 50 PPM of free and dissolved water |

## 800A | 12 00A <br> Enclosed Automated Fuel Maintenance Systems



PDSES Power 800A series is designed to support emergency diesel fuel tank up to 7,600 liters ( 2,000 gallons) volume or small private refuel stations. Can also use as mobile unit.

## Benefits

$\checkmark$ Prevents and removes any biological growth
$\checkmark$ Removes water down to 50 ppm
$\checkmark$ Removes solid paritcles down to 1 micron
$\checkmark$ Advanced filter media
$\checkmark$ Fully automated
$\checkmark$ Fuel tanks will no longer require routine cleaning
$\checkmark$ Easy to install and maintain
$\checkmark$ Very low maintenance costs
$\checkmark$ Keeps the fuel additives suspended in the fuel
$\checkmark$ Keeps your diesel fuel clean and fresh for many years

| flIEM | flow rate LPH/GPM | 800 A |
| :---: | :---: | :---: |
| primary filter- pdses water separator |  |  |

## 2100 Enclosed Automated Fuel Maintenance Systems



## Benefits

$\checkmark$ Prevents and removes any biological growth
$\checkmark$ Removes water down to 50 ppm
$\checkmark$ Removes solid paritcles down to 1 micron
$\checkmark$ Advanced filter media
$\checkmark$ Fully automated
$\checkmark$ Fuel tanks will no longer require routine cleaning
$\checkmark$ Easy to install and maintain
$\checkmark$ Very low maintenance costs
$\checkmark$ Keeps the fuel additives suspended in the fuel
$\checkmark$ Keeps your diesel fuel clean and fresh for many years

PDSES Power 2100 series is designed to support emergency diesel fuel tank up to 50,000 liters ( 13,200 gallons) volume or small private refuel stations. Can also use as mobile unit.

| ITEM | 2100 |
| :---: | :---: |
| flow rate LPH/GPM | 2100/9.26 |
| primary filter-pdses water separator | LS21532AA |
| secondary filter pdses depth filter | SDX2 |
| PLC | PDSES Main programed controller $7^{\prime \prime}$ Touch screen to control all machine sensors and outage communications - Modbus, IP or GPRS (optional) |
| power pack | High Quality monoblock gear pump |
| electric motor | FLP Electric Motor ( $1.5 \mathrm{KW}, 2 \mathrm{HP}, 4$ Pole, 1440 RPM, Foot cum Face Mounted (B34) 415 Volts, 50Hz, 3 Phase, Class F, IP 55 Frame Size: 90 FLP |
| plumbing | 3/4* SS Or metal hoses |
| main cabinet | Heavy Duty Outd oor Cabinet Powder Coated Or Stainless Steel with Adjustable foot, and wall mount |
| internal cabinet | IP55 cabinet for all electronic devices, Powder coated or Stainless Steel |
| dimensions | Metric (mm) : W-1100/H-1500/D-380 \| Inch : W-43"/H-59" / D-15" |
| weight | $132 \mathrm{Kg} \mathrm{\mid} 291 \mathrm{Lbs}$ |
| particle removal capability | Down to 1 Micron of Solid or Sami-Solid particles |
| water removal capability | Down to 50 PPM of free and dissolved water |

## 3200 Enclosed Automated Fuel Maintenance Systems



## Benefits

$\checkmark$ Prevents and removes any biological growth
$\checkmark$ Removes water down to 50 ppm
$\checkmark$ Removes solid paritcles down to 1 micron
$\checkmark$ Advanced filter media
$\checkmark$ Fully automated
$\checkmark$ Fuel tanks will no longer require routine cleaning
$\checkmark$ Easy to install and maintain
$\checkmark$ Very low maintenance costs
$\checkmark$ Keeps the fuel additives suspended in the fuel
$\checkmark$ Keeps your diesel fuel clean and fresh for many years

PDSES Power 3200 series is designed to support emergency diesel fuel tank up to 75,000 liters ( 19,750 gallons) volume or small private refuel stations. Can also use as mobile unit.

| ITEM | 3200 |
| :---: | :---: |
| flow rate LPH/GPM | 3200/14.1 |
| primary filter-pdses water separator | KB37620AA with auto drain |
| secondary filter pdses depth filter | KBSD X 3 |
| PLC | PDSES Main programed controller 7" Touch screen to control all machine sensors and outage communications - Modbus, IP or GPRS (optional) |
| power pack | High Quality monoblock gear pump |
| electric motor | FLP Electric Motor 1.5KW, 2HP, 4 Pole, 1440 RPM, Foot cum Face Mounted (B34) 415 Volts, $50 \mathrm{~Hz}, 3$ Phase, Class F, IP 55 Frame Size: 90 FLP |
| plumbing | 3/4" SS Or metal hoses |
| main cabinet | Heavy Duty Outdoor Cabinet Powder Coated Or Stainless Steel with Adjustable foot, and wall mount |
| internal cabinet | IP55 cabinet for all electronic devices, Powder coated or Stainless Steel |
| dimensions | Metric (mm) : W-1100/H-1500/D-380 \| Inch: W-43"/H-59" / D-15" |
| weight | $148 \mathrm{Kg} \mathrm{\mid} 326 \mathrm{Lbs}$ |
| particle removal capability | Downto 1 Micron of Solid or Sami-Solid particles |
| water removal capability | Down to 50 PPM of free and dissolved water |

## 3200B Enclosed Automated Fuel Maintenance Systems



## Benefits

$\checkmark$ Prevents and removes any biological growth
$\checkmark$ Removes water down to 50 ppm
$\checkmark$ Removes solid paritcles down to 1 micron
$\checkmark$ Advanced filter media
$\checkmark$ Fully automated
$\checkmark$ Fuel tanks will no longer require routine cleaning
$\checkmark$ Easy to install and maintain
$\checkmark$ Very low maintenance costs
$\checkmark$ Keeps the fuel additives suspended in the fuel
$\checkmark$ Keeps your diesel fuel clean and fresh for many years

PDSES Power 3200B series is designed to support emergency diesel fuel tank up to 75,000 liters ( 19,750 gallons) volume or small private refuel stations. Can also use as mobile unit.

| ITEM | 3200B |
| :---: | :---: |
| flow rate LPH/GPM | 3200/14.1 |
| primary filter- pdses water separator | KB37620AA with auto drain |
| secondary filter pdses depth filter | none |
| PLC | PDSES Main programed controller 7" Touch screen to control allmachine sensors and outage communications - Modbus, IP or GPRS (optional) |
| power pack | High Quality monoblock gear pump |
| electric motor | FLP Electric Motor $1.5 \mathrm{KW}, 2 \mathrm{HP}, 4$ Pole, 1440 RPM, Foot cum Face Mounted (B34) 415 Volts, 50 Hz , 3 Phase, Class F,IP 55 Frame Size: 90 FLP |
| plumbing | 3/4" SS Or metal hoses |
| main cabinet | Heavy Duty Outdoor Cabinet Powder Coated Or Stainless Steel with Adjustable foot, and wall mount |
| internal cabinet | IP55 cabinet for all electronic devices, Powder coated or Stainless Steel |
| dimensions | Metric (mm) : W-1100/H-1500/D-380 \| Inch: W-43"/H-59" / D-15" |
| weight | 126 Kg I 278 Lbs |
| particle removal capability | Down to 1 Micron of Solid or Sami-Solid particles |
| water removal capability | Down to 50 PPM of free and dissolved water |

## 4500 Enclosed Automated Fuel Maintenance Systems



## Benefits

$\checkmark$ Prevents and removes any biological growth
$\checkmark$ Removes water down to 50 ppm
$\checkmark$ Removes solid paritcles down to 1 micron
$\checkmark$ Advanced filter media
$\checkmark$ Fully automated
$\checkmark$ Fuel tanks will no longer require routine cleaning
$\checkmark$ Easy to install and maintain
$\checkmark$ Very low maintenance costs
$\checkmark$ Keeps the fuel additives suspended in the fuel
$\checkmark$ Keeps your diesel fuel clean and fresh for many years

PDSES Power 4500 series is designed to support emergency diesel fuel tank up to 100,000 liters ( 26,300 gallons) volume or small private refuel stations. Can also use as mobile unit.

| ITEM | 4500 |
| :---: | :---: |
| flow rate LPH/GPM | 4500/19.8 |
| primary filter-pdses water separator | KB37620AA with auto drain |
| secondary filter pdses depth filter | KBSD X 4 |
| PLC | PDSES Main programed controller $7^{* *}$ Touch screen to control all machine sensors and outage communications - Modbus, IP or GPRS (optional) |
| power pack | High Quality monoblock gear pump |
| electric motor | FLP Electric Motor 2.2 KW , 3HP, 4 Pole, 1440 RPM, Foot cum Face Mounted (B34) 415 Volts, $50 \mathrm{~Hz}, 3$ Phase, Class F, IP 55 Frame Size: 100 FLP |
| plumbing | 3/4" SS Or metal hoses |
| main cabinet | Heavy Duty Outdoor Cabinet Powder Coated Or Stainless Steel with Adjustable foot, and wall mount |
| internal cabinet | IP55 cabinet for all electronic devices, Powder coated or Stainless Steel |
| dimensions | Metric (mm) : W-1100/H-1500/D-380 I Inch : W-43"/H-59 / D-15* |
| weight | 155 kg I 342 Lbs |
| particle removal capability | Down to 1 Micron of Solid or Sami-Solid particles |
| water removal capability | Down to 50 PPM of free and dissolved water |

## 4500B Enclosed Automated Fuel Maintenance Systems



## Benefits

$\checkmark$ Prevents and removes any biological growth
$\checkmark$ Removes water down to 50 ppm
$\checkmark$ Removes solid paritcles down to 1 micron
$\checkmark$ Advanced filter media
$\checkmark$ Fully automated
$\checkmark$ Fuel tanks will no longer require routine cleaning
$\checkmark$ Easy to install and maintain
$\checkmark$ Very low maintenance costs
$\checkmark$ Keeps the fuel additives suspended in the fuel
$\checkmark$ Keeps your diesel fuel clean and fresh for many years

PDSES Power 4500B series is designed to support emergency diesel fuel tank up to 100,000 liters ( 26,300 gallons) volume or small private refuel stations. Can also use as mobile unit.

| ITEM | 4500B |
| :---: | :---: |
| flow rate LPH/GPM | 4500/19.8 |
| primary filter-pdses water separator | KB37620AA with auto drain |
| secondary filter pdses depth filter | none |
| PLC | PDSES Main programed controller $7^{\prime \prime}$ Touch screen to control all machine sensors and outage communications - Modbus, IP or GPRS (optional) |
| powerpack | High Quality monoblock gear pump |
| electric motor | FLP Electric Motor $2.2 \mathrm{KW}, 3 \mathrm{HP}, 4$ Pole, 1440 RPM, Foot cum Face Mounted (B34) 415 Volts, $50 \mathrm{~Hz}, 3$ Phase, Class F, IP 55 Frame Size: 100 FLP |
| plumbing | 3/4" SS Or metal hoses |
| main cabinet | Heavy Duty Outdoor Cabinet Powder Coated Or Stainless Steel with Adjustable foot, and wall mount |
| internal cabinet | IP55 cabinet for all electronic devices, Powder coated or Stainless Steel |
| dimensions | Metric (mm) : W-1100/H-1500/D-380 I Inch: W-43"/H-59"/ D-15" |
| weight | 126 Kg I 278 Lbs |
| particle removal capability | Down to 1 Micron of Solid or Sami-Solid particles |
| water removal capability | Down to 50 PPM of free and dissolved water |



# PDSES 

FUEL MAINTENANCE

