Product Datasheet

OILLIFE

Reduce costs and extend service intervals by up to four times with OilLife

Filtration and evaporation removes solid, chemical & gaseous contaminants

Properly lubricated machines will give a more reliable and profitable service to the operator. But oil is vulnerable to contamination both in storage and during service. Our OilLife filtration system is effective at removing contamination and keeping engines running.

To keep oil healthy, it is passed through long-strand, protein-rich cotton to filter out contamination as small as 1 micron. Once filtered, the oil enters a heated evaporation chamber where liquid contaminants and gases evaporate and are vented.

Our OilLife units are available to suit engines between 300 and 1,000HP with oil capacities from 30 to 200l (for engines with greater HP or oil capacities, multiple units can be installed in parallel). OilLife is ideal for any hard-working mechanical part - engines, gearboxes, hydraulic systems and axles (to name just a few).

OilLife prolongs the effective life of your oil, improving lubrication, extending drain intervals and reducing equipment wear.

Increase productivity

Our OilLife ensures that engines keep running. This helps drive operating hours up. A dump truck with a 500 hour service interval can easily run for 2,000 hours with OilLife installed.

Reduce costs

By keeping oil contamination-free, substantial savings can be made through reduced oil usage and disposal costs. Savings can also be made through a reduction in filter replacements and the ongoing consumable costs. Finally, clean oil brings with it extended rebuild intervals and the reduced likelihood of costly unscheduled maintenance due to breakdown.

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Why is oil filtration important?

About 80% of engine failures can be attributed to contaminated oil impairing engine lubrication*. In hydraulic systems, the figure is even higher with around 95%** of breakdowns being caused by oil-borne contaminants.

Oil contamination can cause extensive damage to engines including blocked filters, damaged bearings and gears.

Traditional full-flow filters usually struggle to remove small wear particles and are unable to remove liquid, gaseous and acidic contamination.

OilLife is essential for industries that rely on heavy capital equipment (particularly in remote locations) where unscheduled maintenance means lost productivity.

Types of contamination found in oil

There are many types of contamination that can affect oil. The most common are water and particulate contaminants e.g. soot and glycol.

- Water: Water is one of the most destructive contaminants in lubrication. Its presence leads to the formation of acid which depletes additives and interferes with oil viscosity. Water combines with combustion by-products such as sulphur dioxide and trioxide to form sulphuric acid. The presence of acid will cause a rapid drop in the oil's alkalinity (its TBN or Total Base Number), resulting in a corrosive environment.
- Particulates: A common type of particle contamination is soot. It is a by-product of combustion and will be found in all diesel engines and most petrol engines. While the majority of soot exits through the exhaust, some gets past the piston rings and ends up in the oil. If soot particles build up in the oil it is likely an oil change will be required. Often, these oil changes are too frequent and avoidable. OilLife filters out solid particulates keeping the oil flowing and extending the oil change intervals.
- Glycol: Glycol, an active component found in anti-freeze, is a common contaminant in engine oils. It can weaken a lubricant's properties. Oil will not flow and shear as readily as before because anti-freeze thickens it. This could be damaging to parts of the engine that require a less viscous lubricant to properly protect them.

* source: http://www.machinerylubrication.com/Read/1291/lubricant-cleanliness
** source: http://www.machinerylubrication.com/Read/30624/mining-industry-lubrication

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How OilLife works

Our OilLife system combines the dual-action process of filtration and evaporation to remove all oil-borne contaminants.

Contaminated oil is transferred through a small metering jet under normal engine oil pressure supplied by the engine's oil pump.

It is passed through highly efficient long-strand, protein-rich cotton, capable of filtration down to 1 micron. Acidic contaminants react with and are retained by the protein-rich cotton fibres, removing them from the oil.

Once filtered, the oil enters the heated evaporation chamber where liquid contaminants and gases evaporate and are vented to the atmosphere. The patented diffuser plate provides a large heated surface area relative to the volume of oil. This increases the volume of oil that OilLife can filter at any time, keeping your equipment running.

After the contaminants are removed, the clean oil is gravity-fed back to the engine's oil sump.

For hydraulic applications such as bow thrusters, a system is available that incorporates its own electrically-powered pump to provide oil circulation through the OilLife unit and back to the hydraulic tank.

Our OilLife dramatically improves engine lubrication and will remove at least 98.4% of solid contaminants down to 1 micron in a single pass.

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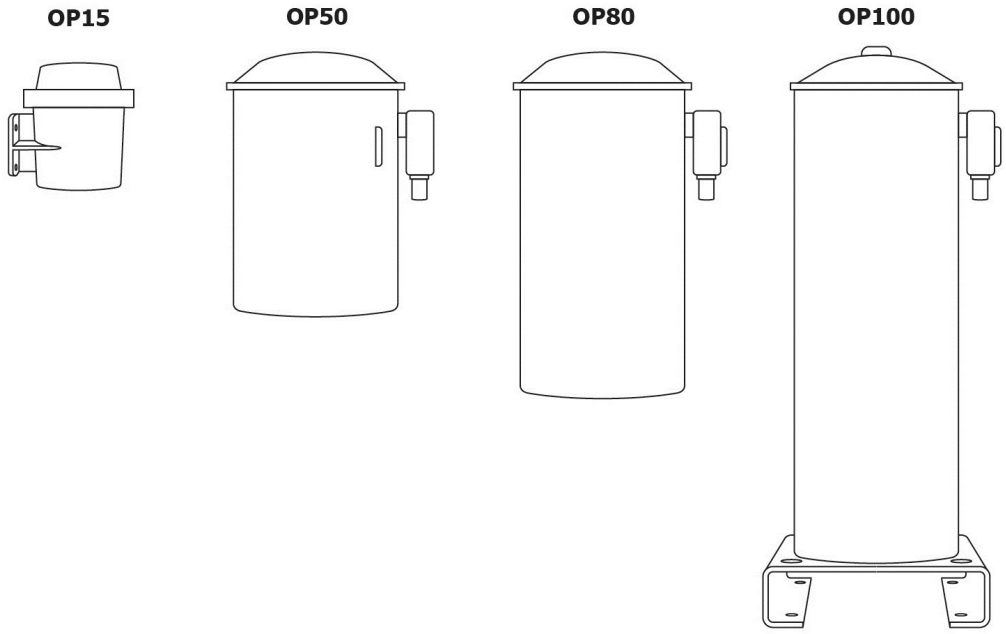
Applications

Extending the life of oil is particularly important in industries that rely on heavy capital equipment – especially if that equipment operates in remote locations. These include:

- Open cast mining vehicles.
- Construction and earth-moving vehicles.
- Commercial and military shipping.
- Passenger transport.
- Landfill power generation.

Oil contamination is prevalent in the mining and quarrying industries. They are some of the most severe commercial environments in the world with air full of abrasive and damaging particles. Up to 95% of mechanical failures in these industries are caused by particle contamination.

Product Range



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Product Range

OP15

The OP15 OilLife system uses both filtration and evaporation to remove solid, chemical and gaseous contaminants from oils and hydraulic fluids.

The OP15 is suitable for engines up to 300HP. It can be used on engines with an oil capacity of up to 30 litres and hydraulic systems with an oil capacity of up to 500 litres.

The OP15 bypass oil filter has a 40 litres per hour flow rate.

It measures 27 x 32 x 19 (cm).

OP50*

**Available for special order only and subject to a minimum order quantity*

The OP50 OilLife system uses both filtration and evaporation to remove solid, chemical and gaseous contaminants from oils and hydraulic fluids.

The OP50 is suitable for engines up to 500HP. It can be used on engines with an oil capacity of 50 litres and hydraulic systems with an oil capacity of up to 1000 litres.

The OP50 bypass oil filter has a 40 litres per hour flow rate.

It measures 32 x 32 x 41 (cm).

OP80

The OP80 OilLife system uses both filtration and evaporation to remove solid, chemical and gaseous contaminants from oils and hydraulic fluids.

The OP80 is suitable for engines up to 800HP. It can be used on engines with an oil capacity of up to 80 litres and hydraulic systems with an oil capacity of up to 2000 litres.

The OP80 bypass oil filter has a 40 litres per hour flow rate.

It measures 32 x 32 x 52 (cm).

OP100

The OP100 OilLife system uses both filtration and evaporation to remove solid, chemical and gaseous contaminants from oils and hydraulic fluids.

The OP100 is suitable for engines up to 1000HP. It can be used on engines with an oil capacity of up to 200 litres and hydraulic systems with an oil capacity of up to 3000 litres.

The OP100 bypass oil filter has a 40 litres per hour flow rate.

It measures 29 x 29 x 76 (cm).

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Technical Specifications

	OP15	OP50*	OP80	OP100
Maximum engine power (hp)	300	500	800	1000
Max oil capacity (engines) (l)	30	50	80	200
Max oil capacity (engines) (UK gallons)	6	11	18	44
Max oil capacity (engines) (US gallons)	7	13	21	53
Maximum oil capacity (hydraulics) (l)	500	1000	2000	3000
Maximum oil capacity (hydraulics) (UK gallons)	33	110	441	661
Maximum oil capacity (hydraulics) (US gallons)	40	100	500	1000
Dimensions (hwd) (cms)	27 x 32 x 19	32 x 32 x 41	32 x 32 x 52	29 x 29 x 76
Flow rate (l/hr)	40	40	40	40
Flow rate (UK gallons/hr)	9	9	9	9
Flow rate (US gallons/hr)	11	11	11	11
Power requirements				
12 VDC (A)	12.5	12.5	12.5	12.5
24 VDC (A)	6.25	6.25	6.25	6.25
110 VDC (A)	1.36	1.36	1.36	1.36
220 VDC (A)	0.68	0.68	0.68	0.68

*The OP50 is available for special order only and is subject to a minimum order quantity.

For engines with greater HP or larger oil capacities, OilLife is still available. Multiple units can be installed in parallel to achieve healthy oil.

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Customer Benefits

Our OilLife system is suitable for engine, hydraulic, transmission and compressor oils. The results and benefits are impressive:

- Oil drain intervals extended by at least 4 times.
- Reduced wear and damage to the engine.
- Reduced oil usage and disposal cost.
- Minimised filter replacement and ongoing consumable costs.
- Reduced likelihood of unpredictable maintenance.

There are also significant financial savings to installing OilLife.

The following costs came from an OilLife customer. It shows how much they were spending on just one dump truck, and how much they saved after installing OilLife.

Without OilLife	Year 1	Year 2	Year 3	Year 4	Year 5	
Services per year	12	12	12	12	12	
Oil cost per service	£224	£224	£224	£224	£224	
Filter cost per service	£60	£60	£60	£60	£60	
Labour cost per service	£200	£200	£200	£200	£200	
Oil Analysis cost per service	£10	£10	£10	£10	£10	
Cost per service	£494	£494	£494	£494	£494	
Cost per year	£5,928	£5,928	£5,928	£5,928	£5,928	£29,640

With OilLife	Year 1	Year 2	Year 3	Year 4	Year 5	
Services per year	3	3	3	3	3	
Oil cost per service	£238	£238	£238	£238	£238	
Filter cost per service	£60	£60	£60	£60	£60	
Labour cost per service	£204	£204	£204	£204	£204	
Oil Analysis cost per service	£10	£10	£10	£10	£10	
OilLife Unit replacement filter	£95	£95	£95	£95	£95	
Cost per service	£607	£607	£607	£607	£607	
Cost per year	£1,821	£1,821	£1,821	£1,821	£1,821	£9,105
OilLife Unit (incl. fitting)	£1,050	£0	£0	£0	£0	£1,050
					Total Saving	£19,485
					Total Saving	66%

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Demp

Industrivej 23, DK-4683 Rønnede, Denmark

+45 39 20 54 22

www.demp.com