



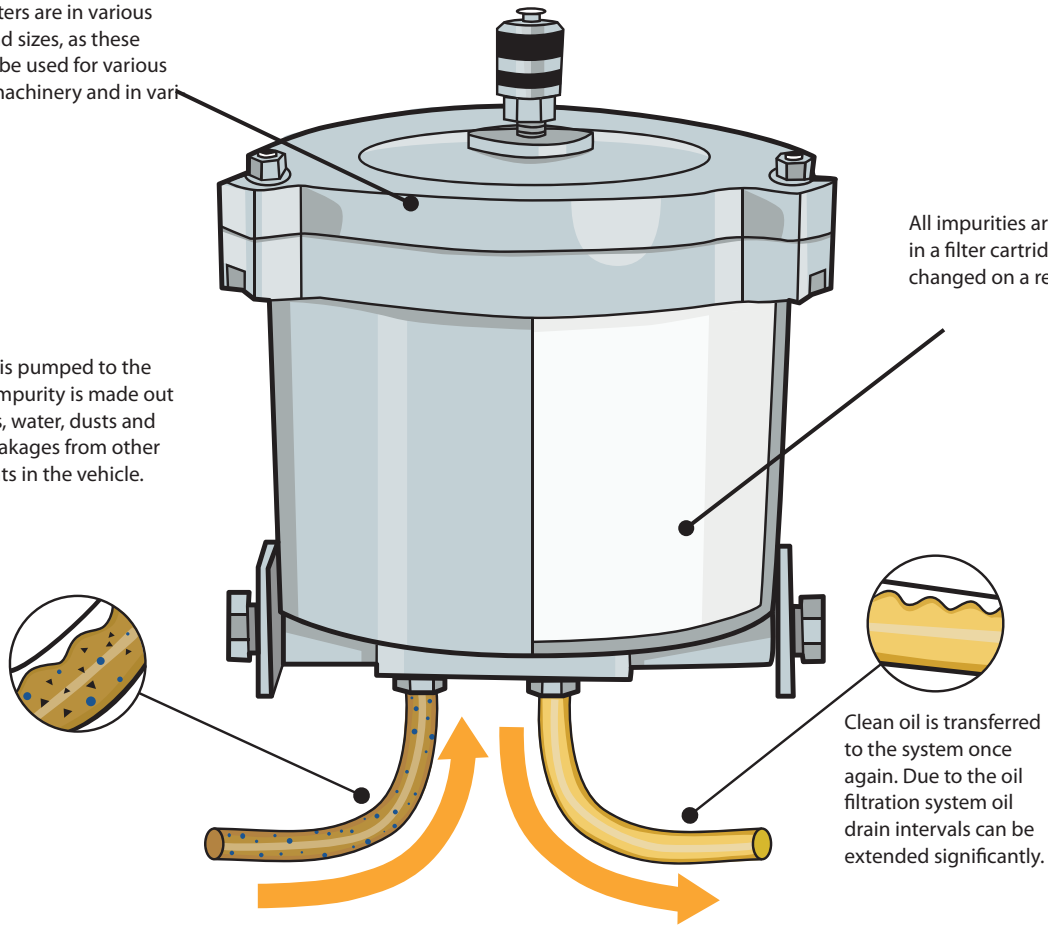
Pure profit!

Clean oil protects machines and saves money

Avoid downtime and reduce wear by-pass oil filters

By-pass filters are in various models and sizes, as these filters can be used for various vehicles/machinery and in various ways.

Impure oil is pumped to the filter. The impurity is made out of particles, water, dusts and possible leakages from other components in the vehicle.



wear with the help of

Nowadays oil drain is performed on a regular basis in accordance with a drawn up scheme. The oil drain is performed in accordance with the scheme by not taking into account whether it is necessary or not. KLEENOIL, in its turn, offers system that filters the oil while the vehicle/machinery operates.

The system include:

- Permanent filter;
- Filter cartridges that shall be changed on a regular basis.

For engine oil and hydraulics

Kleenoil "by-pass" oil filtration system can be used both in engine oil and hydraulic system, but as two separate filters.

For all types of vehicles and machinery

The advantage of Kleenoil "by-pass" filters is that they can be installed in the following vehicles/machinery:

- Busses;
- Trucks;
- Construction machinery;
- Industrial hydraulics;
- Tractors and other agricultural machinery;
- Forestry machinery;
- Ship engines;
- OEM;
- etc.

Filters of all sizes are available; these filters are adjusted to the oil amount of the particular system.

Mobile and fixed solutions for flexible usage...

In addition to filters to be installed in the vehicles and machinery also other types of Kleenoil oil filters are available. Several mobile solutions of filters of various sizes are offered, these filters are added for a period of time of several hours and the oil is pumped through filter and purified (filtered). We are calling this process "dialysis of machinery". The filter can be easily transportable.

It is possible to install also fixed filters, for example, in a workshop by allowing each machinery "to go to depot" in order to perform purification (filtration) of oil.

... and for purification (filtration) of biofuel

By-pass filters can be installed also in depot/ fuel filling stations, for example, for purification (filtration) of biofuel. The fuel is filtered without interruptions and, for example, problems with water are eliminated.



Analysis that render better co short term and long term



KLICARGO #	System	Year	Oil	Status	Oil Volume
KLICARGO 821	Hydraulic System	2011-05	KL-M2003384	ATTENTION	UNDE 1450 8 LTR
KLICARGO 822	Hydraulic System	2011-05	KL-M2003384	NORMAL	KALMAR TRX 182 1.6 LTR
KLICARGO 823	Hydraulic System	2011-05	KL-M2003384	NORMAL	KALMAR TRX 182 1.6 LTR
KLICARGO 824	Hydraulic System	2011-05	KL-M2003384	NORMAL	KALMAR TRX 182 1.6 LTR
KLICARGO 825	Hydraulic System	2011-05	KL-M2003384	NORMAL	KALMAR TRX 182 1.6 LTR
KLICARGO 826	Hydraulic System	2011-05	KL-M2003384	NORMAL	KALMAR TRX 182 1.6 LTR
KLICARGO 827	Hydraulic System	2011-05	KL-M2003384	NORMAL	KALMAR TRX 182 1.6 LTR
KLICARGO 828	Hydraulic System	2011-05	KL-M2003384	NORMAL	KALMAR TRX 182 1.6 LTR
KLICARGO 829	Hydraulic System	2011-05	KL-M2003384	NORMAL	KALMAR TRX 182 1.6 LTR
KLICARGO 830	Hydraulic System	2011-05	KL-M2003384	NORMAL	KALMAR TRX 182 1.6 LTR

Effective purification (filtration)

Engine oil itself is quite impure, even if unused. With Kleenoil filter the oil is purified (filtrated) without interruptions from:

- all hard particles larger than 3 microns;
- water;
- dust;
- possible leakages in oil from other systems in engine.

In the result the oil will carry out its work, instead causing greater risk of wear for all components of engine. Due to the previously mentioned the oil can be used for an extended period of time in comparison with previous period of time – up to ten times more. The oil shall be drained after a longer period of time and the amount of oil will reduce. The period of time saved within the service can be used for preventive maintenance of vehicles/machinery.

En hälsokontroll för hela fordonet

In addition to first "diagnosis", the oil samples can be used for several objectives. Oil samples can be taken on a regular basis in order to gain general picture regarding the necessity of engine

ontrol both in



oil and hydraulic oil in the vehicle/machinery.
The expression "check the oil" really gains a new meaning!

Oil samples can be taken in order to examine technical condition of the corresponding machinery, because in such manner it can be examined whether the oil contains metal particles and that, in its turn, indicates that some component parts start to break. Therefore, we are suggesting you to perform oil examination, for example, if you are purchasing used vehicle or used machinery, in order to make sure of the condition of the vehicle/machinery.

Good for what?

The work style of Maskinsupport is profitable for all those who are interested in safety. Greater beneficiaries are especially those enterprises that are working in extreme conditions and whose vehicles and machinery are subjected to great load and continuous work. That is one of the reasons why insurance companies recommend our system, for example.

Extended oil service life – shorter downtime

An engine or hydraulic system that is working with clean oil is not subjected to unnecessary effort, but the oil service life, in its turn, can be extended considerably. No unnecessary services are needed and there are no expenses regarding expensive spare parts, as well as downtime intervals due to oil drain or unscheduled service are reduced.

Interesting facts I

Our oil purification (filtration) technique originally was elaborated by British militarists in 1930s in order to improve the safety of caterpillar vehicles in the desert.

Interesting facts II

With Maskinsupport oil purification (filtration) system the service life of ordinary oil is extended up to ten times.

Interesting facts III

After installing the filter and allowing tractor to work 4-5 hours in an idle run, the number of particles in the oil has reduced approximately for 90%. The smallest particles, smaller than 5 microns, are reduced approximately for 70%.

Did you know?

Those oil filters, installed as standard at acquisition, usually do not have such functions as Klee-noil filters.

Simple installation that becomes profitable rapidly

We start up work with Maskinsupport oil purification (filtration) system, "by-pass" in the following manner:

- An oil sample is taken from the vehicle or machinery.
- The oil sample is analyzed – similarly like in blood test – a result regarding the condition of oil is gained, as well as indications on possible parts of machinery endangered.
- The result regarding oil sample is published and is easily available on web service. A recommendation regarding the activities to be performed is added to the result.
- You yourself evaluate the gained result or are using assistance of Maskinsupport and prepare an activity plan.
- If it turns out that you need a filtration system, then it will be simply installed into your vehicle/machinery.
- New filter cartridges will be supplied to you in accordance with the prepared plan or by making an order.

Simple installation

In Sweden KLEENOIL oil filters are installed into thousands of vehicles/machinery both as standard filter and after assembling. The filters are used also in several other countries. Usually the installation takes approximately one hour. The change of filter takes approximately 5 minutes.

An investment that pays-off rapidly

Usually an investment made in Maskinsupport system pays-off already in the first year. Take calculations and make your own estimation!

Do you want to know more?

In order to gain information on technical specification, please, visit our home page, as well as see the film and obtain additional information.

www.maskinsupport.se



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Profit starting from the first day!

Profit starting from the first day!

An investment made in KLEENOIL system usually pays-off approximately within one year. We offer various financing possibilities, for example, lease-buy, that ensures that you acquire a part of economic advantages at once. Please get in touch with us to find out current provisions!



Comments from satisfied clients

Up to now Kleenoil filters, as standard equipment, are installed into approximately 3 000 containers and loaders used, for example, in ports, iron foundry and pits. The activity of machinery has become safer and we have fewer complaints regarding separate component parts.

Cargotec

The oil analysis was an essential part of the whole work and we have performed many fuel analyses in our busses. At the moment we are taking analysis on a regular basis.

Keolis Sveirige AB

Since the end of 1990s we have installed Kleenoil filters as standard in the hydraulic system in our forwarders and combines. The purification (filtration) is very effective; the filter removes even rust particles and other particles in hydraulic system. The necessity for our clients to perform oil drain is reduced and they can control oil drain better.

Rottne Industries

Machinesupport – your partner for more cleaner oil

Maskinsupport Europa AB offers several tools to find more effective type for the performance of maintenance and at the same time to reduce expenses without great investments. It is a newly founded enterprise (2011) which activity is to develop by-pass filters system and auxiliary devices. Entrepreneurial activity was started up in 1988 in Ytterhogdal, Sweden. Our aim is to provide Swedish market with by-pass filters and products mainly in the industry of vehicles-machinery and with profitable solutions in oil filtration. Now we collaborate with several great enterprises – please, get in touch with us to receive feedbacks regarding us.

The products are represented in the following countries:
Canada, USA, South Africa, Australia, India, Malaysia, Sweden, Germany, France, the Netherlands, Ireland, Latvia, Estonia.

In order to gain more information and see the list of dealers, please, visit our home page www.maskinsupport.se

maskinsupport 

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