



[WWW.KRONE-FILTER.DE](http://WWW.KRONE-FILTER.DE)

OPERATING INSTRUCTIONS

**KRONE  
OIL BATH  
AIR CLEANER  
KF-31...**



**MADE IN GERMANY**

... guarantees fast delivery 

  
**Krone**  
Filtertechnik

0	Preceding pages
0.1	Setup and use of the operating instructions

# KRONE OIL BATH AIR CLEANER SERIES KF-31...

Date of issue: 24.01.2017

Manufacturer: Krone Filtertechnik GmbH  
Herbert- Ludwig Str. 12-14  
D-28832 Achim, Germany  
Telephone: +49(0)4202.9769-0  
Fax: +49(0)4202.9769-11  
E-mail: [info@krone-filter.de](mailto:info@krone-filter.de)



The operating instructions describe the Krone oil bath air cleaner of the series KF-31 ... and the handling of the unit.

This manual is to be kept carefully for future use!

<b>0.2</b>	<b>Contents</b>	
<b>1</b>	<b>Preface</b>	<b>4</b>
<b>2</b>	<b>Safety</b>	<b>5</b>
2.1	<i>Warnings and symbols</i>	5
2.2	<i>Use according to the regulations</i>	5
2.3	<i>Safe operation</i>	5
<b>3</b>	<b>Description of function</b>	<b>6</b>
<b>4</b>	<b>Servicing/maintenance</b>	<b>7</b>
4.1	<i>Service plan</i>	7
4.2	<i>Filter oil change</i>	7
4.3	<i>Filter cleaning</i>	8
<b>5</b>	<b>Spare parts</b>	<b>8</b>

**Preface**

These operating instructions should make it easier for personnel to familiarize themselves with the Krone oil bath cleaner and to use it in the various application areas for which it was designed.

The operating instructions contain important information on operating the components safely, correctly and economically. These instructions must be followed in order to avoid danger, reduce repair costs and down times and increase the reliability and working life of your machine.

The instructions must be made accessible to every person working with the filter.

Furthermore, these instructions must be supplemented as necessary with the applicable national regulations regarding accident prevention and environmental protection (in particular the disposal of removed parts).

We reserve the right to make technical modifications to the filter and/or modify the content of these operating instructions.

2 **Safety**

2.1 *Warnings and symbols*



**Indicates all points in this instruction which must be followed closely in order to avoid damage or destruction of system components.**



**Indicates what the user should pay close attention to in order to ensure trouble-free and economical operation of the equipment.**

2.2 *Use according to the regulations*

The cleaner should only be serviced by trained and authorised personnel.

The Krone oil bath air cleaner is manufactured in accordance with the latest state-of-the-art and complies with the generally recognised safety regulations. Nevertheless, the operational reliability of units installed downstream may put at risk, if:

- » the cleaner is used improperly,
- » the operating conditions are changed,
- » changes or modifications not expressly approved by the manufacturer are made,
- » essential maintenance and repair work is not carried out.

Only use the Krone oil bath air cleaner if it is in perfect working order and if it is to be used in compliance with the regulations for its technical design. In addition, observe all the safety instructions contained in this manual and heed all the warnings. In particular, faults which impair the safety of this equipment must be rectified immediately.

The Krone oil bath air cleaner is exclusively designed for the mechanical filtration of air. Any other or additional use, such as, for example, the filtration of aggressive, inflammable, and/ explosive media is not in accordance with the regulations. The filter manufacturer/supplier accepts no liability whatsoever for damages arising from the medium to be cleaned.

All the risk is carried solely by the user/operating authority.

Use according to the regulations also includes observance of the instructions in the operating manual and compliance with the inspection and maintenance instructions.

2.3 *Safe operation*

The oil bath air cleaner may only be installed and serviced by trained and authorised personnel. The operating authority is obliged to check the oil bath air cleaner at least once per week for visible signs of damage or deficiency as well as any changes (also with regard to operational performance) and to immediately notify the responsible service person.

3

**Description of function**

The Krone oil bath air cleaner is suitable for light to medium dust conditions. For heavy dust conditions Krone Filtertechnik recommends fitting a cyclone as a precleaner.

Krone oil bath air cleaners are used for all kinds of aspirating machines (e.g. engines, compressors, construction and agricultural machines, etc.).

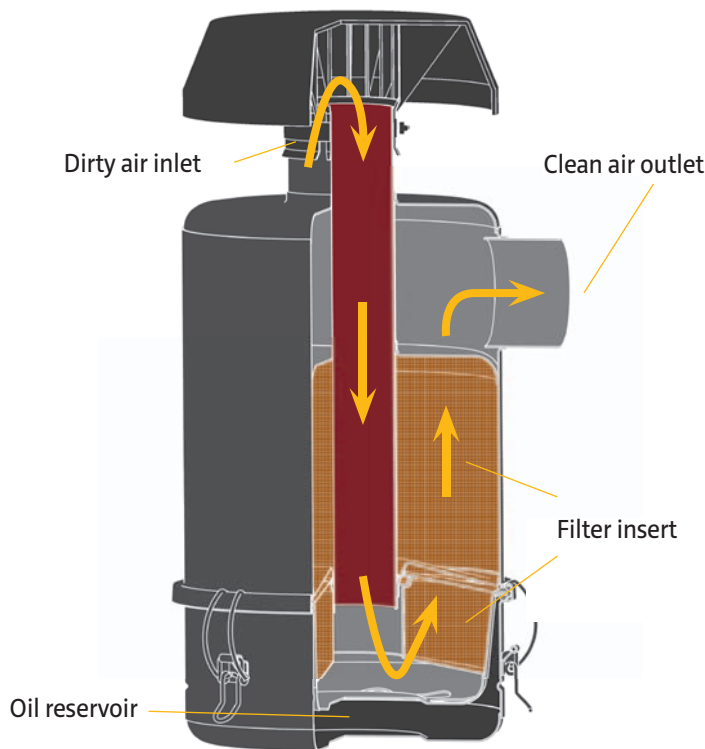
The sucked in air is routed through the oil bath, the dust is pre-separated, and then is diverted upwards. As it flows upwards the filter insert is rinsed with oil from the oil bath and the dirt contained in the intake air settles. As the oil flows back the dirt reaches the oil container and settles there.

Depending on the size, Krone oil bath air cleaners are available with an oval flange, rectangular flange, smooth intake air connections and side air intake.



**Oil bath air cleaners must always be installed in vertical position.**

**Fig. 1: Function principle**



4 **Servicing/maintenance**



**Make sure you turn off the machine (e.g. engine, compressor, blowers, or others) before you carry out cleaning, servicing and maintenance work. Do not start the machine with the filter element removed.**

4.1 *Service plan*

Part	Action	Service time
Filter element	Clean and check for damage	In acc. with the manual of the respective equipment or engine or at least 1 time per year
Filter insert seals	Clean and check for damage	When servicing the cleaner
Filter oil	Change	When deposited dirt has approx. reached half height of the oil filling or at least 1 time per year
Uncleaned and cleaned air lines (connection hoses)	Check for damage/tightness	Monthly and after maintenance work
Housing and bracket	Check for damage/tightness	When servicing the cleaner
Connections	Check for damage/tightness	When servicing the cleaner

4.2 *Filter oil change*

- » Turn off engine.
- » Open fasteners on oil container.
- » Carefully remove the oil container from the bottom.
- » Empty oil container and clean (observe the environmental protection regulations).
- » Check seals for damage and replace if necessary.
- » Clean filter if necessary (see 4.3).
- » Fill oil container with engine oil exactly to the oil mark (see Fig. 2).



**Do not fill in extra oil between the separate filter oil changes.**

- » Place oil container on the filter upper part and close fasteners.
- » Take care the position is correct.

4.3

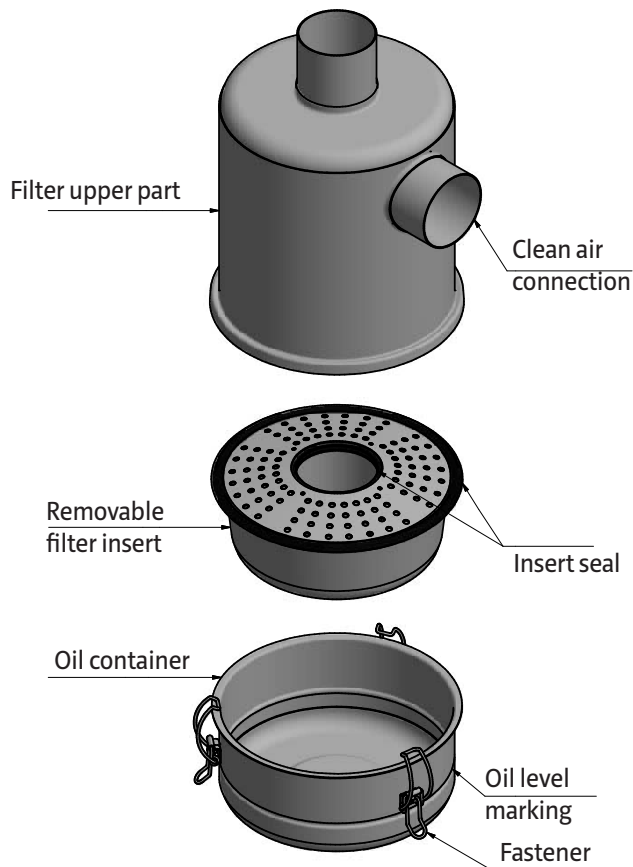
*Filter cleaning*

- » Remove filter upper part by loosening the clean air line and fitting.
- » Wash out the filter upper part and filter insert with diesel fuel (filter and inserts with wire mesh can also be cleaned with a steam jet).
- » Spin dry to completely remove water from cleaned filter and allows to drain.

**Diesel used for cleaning purposes must be correctly disposed of according to the respective environmental protection regulations!**

- » Check seals. Replace damaged seals.
- » After cleaning filter upper part re-fit and connect line on the clean air side making sure it is tight.
- » Fit the oil container (see 4.2).

**Fig. 2: Design configuration**



5

**Spare parts list**

See offer drawing