

Installation

and Operation Manual

Oleopator P Freestanding

## Note

Light liquid separator (separator class I according to EN 858-1) with integrated sludge trap, integrated sampler and optionally alarm systems, for freestanding installation

## Oleopator P Freestanding



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# Content

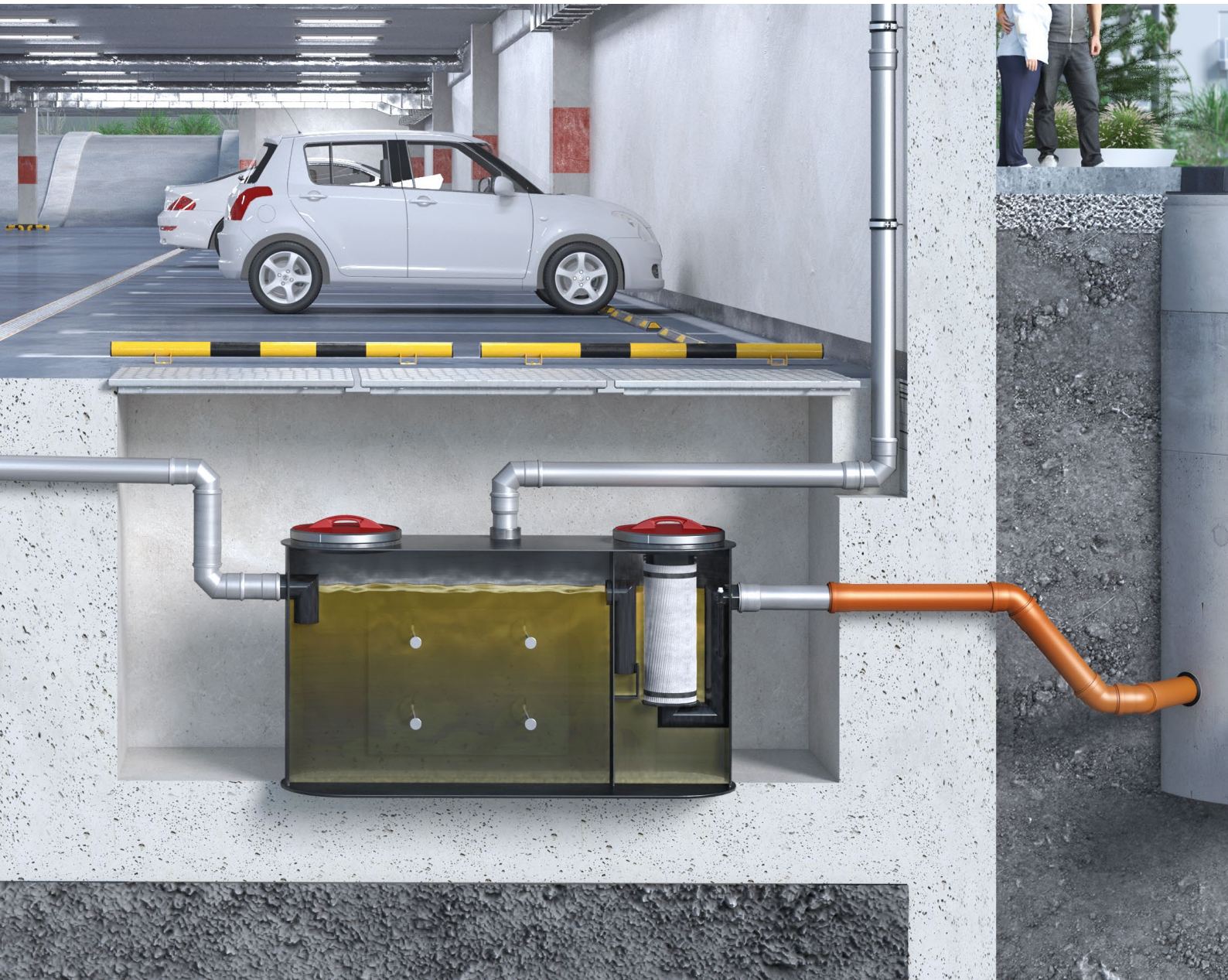
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## Terms and Conditions

**For safe and proper use, read carefully through the instructions and all other documents enclosed with the product, pass them on to the end user and retain until the end of the product's life.**

# 1. Introduction

ACO Industries s.r.o. (hereinafter ACO) thanks you for your trust and provides you with a product (light liquid separator Oleolift-P, hereinafter referred to as “the plant”) that incorporates state-of-the-art technology and has undergone quality controls prior to delivery.



## 1.1. ACO Service

For additional information regarding the plant or accessories, ordering spare parts and services like, maintenance contracts or general inspections, please contact your local ACO dealership or ACO Service.

### **Local dealership/service contact information**

#### **Target group**

The target group for these operating instructions is technically - trained personnel. The personnel must have the appropriate qualifications listed in Chapter 1.2, "Personnel qualifications". The operator must closely regulate areas of responsibility, competence and monitoring of personnel. Any lack of knowledge on the part of the personnel must be rectified through training and instruction by adequately - trained, skilled personnel. Training on the system should be carried out only under the supervision of technical, skilled personnel.

#### **Warranty**

The manufacturer provides this guarantee for 24 months from delivery.



## 1.2. Maintenance, cleaning and control of the oil separation part

ACO recommends that you take out a maintenance contract. This guarantees professional and on-schedule completion of maintenance work by ACO product specialists (ACO Service).

Please consult the table below for the required qualifications for testing, inspection and maintenance are listed below (these could vary depending on local law):

Activities	Person	Knowledge
<b>Layout, operational changes</b>	Planners	Knowledge of building systems and services, evaluation of wastewater technology applications. Layout of light liquid separators and drainage systems. Normative specifications and directives.
<b>Below ground installation</b>	Skilled people	Specific knowledge of civil engineering works.
<b>Sanitary installation</b>	Skilled people	Installing, fixing and connecting of pipes.
<b>Electrical installation</b>	Electrician	Work on electrical connections to power supply must be carried out by qualified electricians only.
<b>Operation monitoring</b>	Operator	No specific requirements.
<b>Operating the plant, self-monitoring, servicing</b>	Properly qualified, competent people	"Expert assessors" in accordance with DIN 1999-100*.
<b>Emptying and cleaning</b>	Properly qualified, competent people	Approved disposal contractor.
<b>General inspection before commissioning and every five years</b>	Qualified people	"Properly qualified, competent people" according to DIN 1999-100**.
<b>Disposal</b>	Skilled people	Appropriate and environmentally - friendly disposal of materials and substances, knowledge of recycling.

\*Definition of "properly qualified, competent people" in accordance with DIN 1999-100:

Properly qualified, competent personnel are people from the owner, operator or designated third parties, who by virtue of their training, knowledge and practical experience ensure that they can execute assessments, inspections or tests and inspections in the respective field properly.

The qualified, competent person can acquire the expertise for the operation and maintenance of the separator plant in a training course followed by on-site instruction, which is offered e.g. by the relevant manufacturers, professional associations, chambers of skilled trades as well as the expert organisations active in the field of separation technology.

\*\*Definition of "properly qualified, competent people" in accordance with DIN 1999-100:

Properly qualified, competent people are employees of companies independent of the operating company/owner, experts or other institutions, who verifiably have the required technical knowledge for the installation operation, maintenance and general inspection of separation plants to the scope named here and have the equipment required to test separation plants and whose independence with regard to its auditing activities is ensured. Independence is ensured, in particular, when the properly qualified, competent person has not implemented any installation and/or remedial measures on the same plant nor executed any self-monitoring.

Verification of technical qualification can be deemed to have been furnished when the requirements e.g. in accordance with RAL-GZ 968 for the assessment group GI-L or equivalent requirements, are fulfilled.

### Enter the tests, inspections, maintenance work and test results in the operating log, such as:

- Inspections by the operator company
- Sampling
- Measuring water consumption, sludge and grease layer thickness, pH value and temperature
- Maintenance and general inspections
- Disposal (draining and cleaning)

### IMPORTANT

If defects are determined during inspection or tests, then the plant may only be initially put back into service when these defects have been remedied.

## 2. Intended use

### 2.1. Area of use

The plant serves to retain light liquids of mineral origin from wastewater. In areas where the handling of light liquids with a mineral origin or mixtures of light liquids may endanger the environment, separator plants for treatment or as retention devices must be provided.

#### **Discharge into public sewerage or combined sewerage systems**

The system can be used in the application areas listed below:

- Treatment of mineral, oil-contaminated rainwater from paved areas where mineral oil products containing up to 100% biodiesel and biofuel oil and/ or 10% ethanol are handled
- Traffic areas (car parks and roads)
- Protection of plants and areas in or on which mineral oil products containing up to 100% biodiesel and biofuel oil and/or up to 10% ethanol are handled (retention)
- Pre-separation of light liquids from wastewater which undergoes more stringent treatment to limit hydrocarbons before being discharged into public sewerage systems
- Treatment of wastewater - containing mineral oil (industrial wastewater), which is produced under operating conditions similar to EN 858-1,2 for industrial processes, the cleaning of oil-contaminated parts and the cleaning of oil-contaminated floor surfaces (workshop floors are only allowed after checking individual cases)

In these cases, the treated discharge water from the plant is intended to be discharged into public sewerage or combined sewerage systems.

#### **Discharge into a body of water**

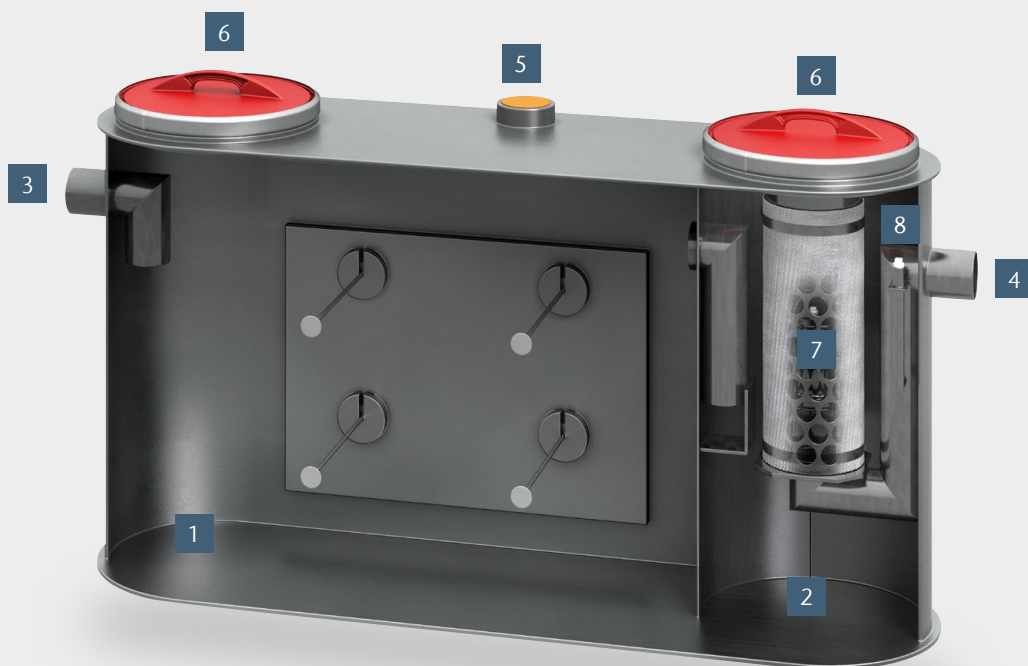
If the discharge water is to be discharged into a body of water, this is only possible in individual cases after the permissibility of such a discharge or any additional requirements that may be necessary have been clarified with the competent water authority.

#### **Special introduction**

The use of the plants for the treatment of wastewater arising from workshop drainage and from the draining, dismantling, compacting and shredding of end-of-life vehicles is only possible in specific cases after the permissibility of such a discharge has been clarified with the competent water authority, since in these cases other pollutants in addition to hydrocarbons may be present in concentrations that cannot be adequately treated in a plant.

## 2.2. Product description

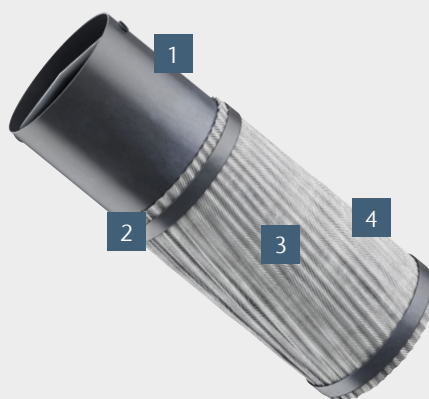
### Oleopator P Freestanding



- |   |                        |   |   |
|---|------------------------|---|---|
| 1 | Sludge trap            | 6 | Unit covers   |
| 2 | Separation part        | 7 | Coalescence unit with inserted closing device (float) |
| 3 | Inlet                  | 8 | Sampler   |
| 4 | Outlet                 |   |   |
| 5 | Ventilation connection |   |   |

### Coalescence unit diagram

- |   |                      |
|---|----------------------|
| 1 | Carrier basket       |
| 2 | Fixing tape          |
| 3 | Coalescence material |
| 4 | Velcro fastener      |





## 2.3. Installation and initiation

Install as close as possible to the point of waste water incidence, in well-ventilated, frostfree rooms, circulation or storage areas. Easily accessible for installation, operation, disposal, maintenance and cleaning.

### Step by step installation

1. Place the separator on an even surface.
2. Connect inlet (3) and outlet (4) piping, and pay attention to look the direction of the flow.
3. Connect the ventilation pipe (5) of the separation part to the building's ventilation system.
4. Remove the coalescence unit (7) and floater from the separator.
5. Fill the separator by removing the coalescence unit and floater from the separator. Fill with water through the inlet pipe until the water starts to run into the outlet (4) piping. Continue until the water level stops rising.
6. Insert the floater and the coalescence unit (7) into the float cage. The floater is in the right position if its top plate is visible at the water level.
7. Check for the free movement of the floater.
8. Check to see if the type label is well fixed.

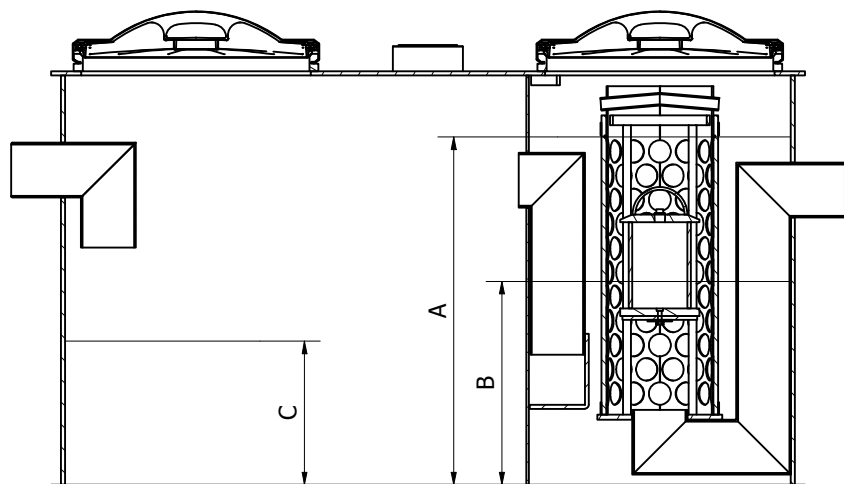
**The separator is ready to use.**

### 2.3.1. Alarm device installation

**In case of a Alarm device installation (optional accessory), follow separate installation instructions for the alarm device.**

1. Drill holes through the top of the unit on marked points (crosses).
2. Install cable glands (part of the installation set).
3. Install alarm sensor cables through the cable glands and position sensors to the correct level.

#### Alarm device levels



Volumes and levels chart

Art. Nr. Of Oleopator	NS	Sludge trap volume (l)	A Max. overflow (mm)	B Max. oil level (mm)	C Max. sludge level (mm)
418600.LC	3	0	700	325	0
418601.LC	3	300	700	320	275
418602.LC	3	600	930	550	390
418603.LC	6	0	925	535	0
418604.LC	6	600	1150	660	475
418605.LC	6	1200	1250	760	525
418606.LC	10	0	925	535	0
418607.LC	10	1000	1535	1140	435
418608.LC	15	0	970	560	0
418609.LC	15	1500	1570	1160	445
418610.LC	20	0	1175	615	0
418611.LC	20	2000	1645	1085	320
418612.LC	30	0	1160	555	0
418613.LC	30	3000	1910	1305	450
418600.HC	3	0	700	325	0
418601.HC	3	300	700	320	275
418602.HC	3	600	930	550	390
418603.HC	6	0	925	535	0
418604.HC	6	600	1150	660	475
418605.HC	6	1200	1250	760	525
418606.HC	10	0	925	535	0
418607.HC	10	1000	1535	1140	655
E418600	3	0	700	325	0
E418601	3	300	700	320	275
E418602	3	600	930	550	390
E418603	6	0	925	535	0
E418604	6	600	1150	660	475
E418605	6	1200	1250	760	525
E418606	10	0	925	535	0
E418607	10	1000	1535	1140	655

## 2.4. Biannual maintenance, cleaning and control of the oil separation part

### IMPORTANT

- Maintenance, cleaning and control of the unit's oil separation part must be done by a competent person according to Chapter 1.2.
- If defects are identified during tests or inspections, the light liquid separator plant must not be put back into service until these defects have been remedied.

### 2.4.1. Maintenance

Maintenance of the separator should be done by an expert according to Chapter 1.2 (a trained person in the company or an external specialist), and it must include at least the following points:

- Sludge trap - installation and measurement of the sludge volume.
- Separator - measurement of the oil volume.
- The floater function - checking the coalescence unit for flow continuity and whether the water levels before and after the coalescence unit differ.

### 2.4.2. Discharge and cleaning

Arrange the timing of the cleaning in such a way that during the cleaning process, either no water or a very small amount of wastewater flows in. Discharge is recommended:

- If either half of the volume of the sludge trap is filled or 80% of the storage capacity of the oil is filled.
- If the heading-up water in the separator is high due to a blockage in the coalescence unit.
- To perform a complete cleaning every half of a year, unless local authorities state differently.

### 2.4.3. Cleaning the coalescence unit

Open the separator and remove the coalescence unit. Clean the coalescence unit on the spot from which the water flows into the separator again. It is not necessary to remove the coalescence material from the carrier basket, because it is possible to do the cleaning in the assembled state.

- Wash (hose down) with a current of at least  $\frac{3}{4}$  inch, and a maximum pressure of 10 bars.
- Wash with a high-pressure unit of a maximum 90 bars and a water temperature of 80°C; the nozzle distance from the coalescence filter should be approximately 15 cm.
- Use detergent only if necessary.

#### 2.4.4.

### A complete cleaning

- Separator - pump out completely the contents of the separator.
- Floater - remove from the float cage, clean, check and set aside.
- Coalescence unit – remove and clean as described above.
- The sensors of the idOil 20 or idOil 30 alarm (if applicable) - clean and check when triggered in accordance with the manufacturer's instructions, assembly and operating instructions "idOil 20" or "idOil 30".

#### 2.4.5.

### Repeated service

- Separator - fill the unit with water through the inlet pipe until the water starts to run into the outlet piping. Continue until the water level stops rising.
- Floater - place into the cage in the floating position.
- Coalescence unit - put on the float cage.
- Cover - cover the separator.

# Notes

A large grid of dotted lines for taking notes, consisting of 20 columns and 30 rows of small squares.

ACO. creating  
the future of drainage



Every ACO product supports  
the ACO system chain



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