# Labkotec alarm devices for oil and grease separators



idSET-3

idSET-OTM

Protect the environment by preventing pollution accidents

Monitor alarm levels for grease, oil and sludge in separators

Monitor leakage in separators

Indication when separator needs emptying – reduce waste management cost

Continuous oil layer thickness measurement

Optimize separator functions

Fulfil requirements of EN 858-1&2 standards

Fail-safe



LabkoNet\* CONNECTED

Measures for a better tomorrow



id0il-30

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# Sustainable measurement solutions

#### Protect the environment

Oil and grease separators are crucial in safeguarding our environment. The surest way to maintain a separator's reliability is by equipping it with alarm devices. This proactive measure is essential to prevent ecological harm and mitigate potential legal liabilities.

#### **Cost savings**

Investing in effective alarm systems can lead to substantial savings in maintenance costs. These systems ensure that separators are serviced at the optimal time, promoting cost-efficiency.

#### **Compliance with standards**

Labkotec's alarm systems for oil separators are fully certified with ATEX, IECEx, and UKEX approvals. Our sensors are designed for safe installation in explosive atmospheres, meeting all regulatory requirements.

#### **Continuous monitoring**

For remote locations or sites without power, our battery or solar-powered systems provide a dependable monitoring solution. These systems come equipped with an internal modem, enabling around-the-clock surveillance. Opt for LabkoNet to automate site monitoring, offering you peace of mind.

The EN 858-1&2 standard stipulates that alarms must be used in oil separators, and simultaneously form the basis for the CE-mark on oil separators.

Labkotec alarm devices are approved in accordance with the ATEX directive 2014/34/EU, IECEx and UKEX.

# LabkoNet<sup>®</sup> compatible

Labkotec alarm devices can be connected to the cloud based LabkoNet system with an internal modem or with the separate Labcom modem. LabkoNet is an easy and reliable way to transfer and control remotely alarm data. For further information on LabkoNet and its key benefits, please visit www.labkonet.com

#### Choose the market-leading solution

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Labkotec sets the standard with the most comprehensive selection of alarm devices for oil and grease separators. Our commitment to design excellence has enhanced both reliability and performance, reinforcing our role in environmental protection.

#### Stay connected with LabkoNet

Our LabkoNet Connected systems feature seamless integration with the LabkoNet service, ensuring secure, immediate access to measurement data and alarms, even remotely. LabkoNet offers a clear, visual representation of separator statuses, enabling prompt action when necessary.

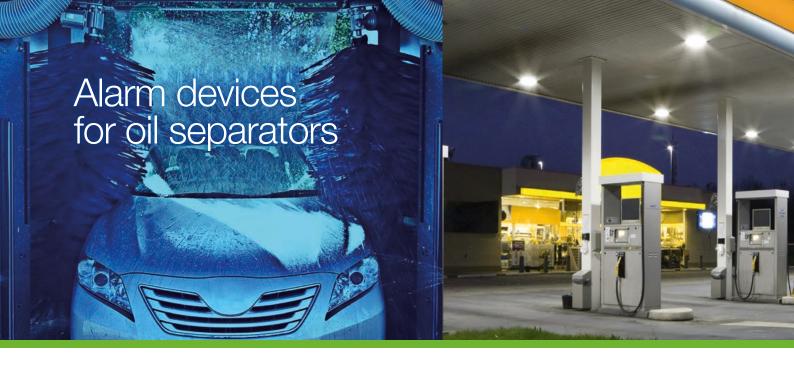
#### Use data to make better decisions

By collecting and analyzing measurement data, you can make optimal decisions.

## Key benefits of Labkotec's solutions

- Comply with relevant standards and regulations.
- Receive instant alerts for critical incidents, such as oil spills, to avert significant environmental harm.
- Minimize routine service expenses by emptying separators only when necessary, as indicated by our relieable alarms.
- The OTM feature allows for the optimization of emptying routines using real-time data on oil layer thickness in the separator.
- Enhance cost-efficiency and operational effectiveness with LabkoNet remote monitoring.
- With continuous monitoring of any leakage environmental safety is ensured.





# idSET<sup>®</sup> and idOil<sup>®</sup> control units

idSET and idOil alarm systems are designed for monitoring liquid levels in oil separators.



# idSET-OTM oil layer thickness measurement

idSET-OTM is a measuring device for continuous measurement of the oil layer thickness in the oil separator.

The new OTM feature with LabkoNet optimize emptying and maintenance routines.

idSET-OTM is a LabkoNet Connected device which means it's automatically connected to LabkoNet when commissioned.

Most common application areas



### idSET-34 oil separator alarm

The design of the new generation idSET-34 is the result of Labkotec's long experience and customer feedback, as well as the latest requirements from European norms.

Up to three different types of idOil sensors can be connected polarityfree, and they are identified automatically with a one-touch commissioning feature.

Petrol stations

GaragesAirports

- MotorwaysParking lots
- Oil terminals



#### idOil-30 oil separator alarm

Up to three idOil sensors of any type can be connected polarity-free, and they are identified automatically with a one-touch commissioning feature. The idOil-30 offers extremely easy commissioning, flexible configuration locally via WLAN, as well as alarm logging. Available also with an internal modem and in 12 V DC operation voltage.



idOil-D30 oil separator alarm

The idOil-D30 has the same features as the idOil-30, but is smaller in size, and can be mounted in an electrical cabinet on DIN rails.



# idSET and idOil sensors

All idSET and idOil sensors are polarity free digital sensors. This speeds up installation and commissioning, and saves on cabling costs.

#### idOil-LIQ high liquid level sensor

Indicates when the liquid level in the oil separator rises excessively e.g. in an outlet blockage situation.

#### idOil-OIL oil sensor

Detects oil and indicates when the separator's oil storage is full.

#### idOil-SLU sludge sensor

Monitors the sludge layer in the oil separator and indicates when the sludge layer has reached its maximum level.



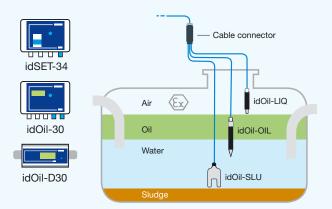
# idSET-OTM oil layer thickness sensor

Measures oil layer thickness in the oil separator

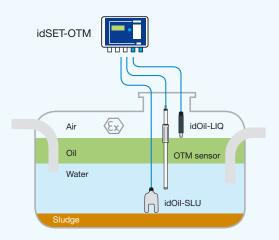


# Applications

With the idSET and idOil alarm systems, excessively high liquid levels, oil layer thickness and sludge layer thickness can be monitored.



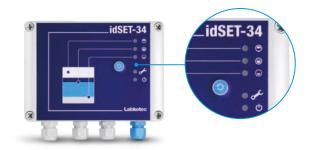
# idSET-OTM alarm system measures oil layer thickness continuously.



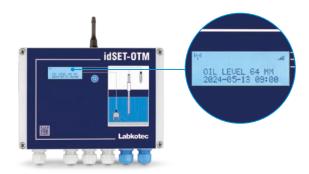




# See the status at a glance



Thanks to the distinct LED lights you can see the status of your separator and idSET-34 alarm device at a glance.



The four-line LCD display with backlight informs you of the oil layer thickness in the separator.

# Integrated display and local wireless configuration



#### Local display and alarms

View the system status on idOil-30 or idOil-D30 control unit display. The integrated display offers easy access to device status on most important alarms and failures on the control unit.



The WEB UI and LabkoNet CONNECTED

Device setting can be done through WLAN connection locally between a control unit and laptop/tablet/smartphone.

LabkoNet CONNECTED is easily activated during commissioning and your site is efficiently monitored via LabkoNet.



# Flexible separator alarm system build-up



# Complete alarm system packages

Choose a control unit and sensors and create an alarm system according to your needs.

### idOil-30 LOS package consists of:

- Control unit idOil-30
- idOil-LIQ high liquid level sensor
- idOil-OIL oil sensor
- idOil-SLU sludge sensor
- Cable connector LCJ1-3
- Mounting kits for control unit and sensor



### idSET-OTM LTS package consists of:

- Control unit idSET-OTM
- idOil-LIQ high liquid level sensor
- idOil-OTM oil sensor
- idOil-SLU sludge sensor
- Cable connector LCJ1-3
- Mounting kits for control unit and sensor





# Alarm devices for oil separators

# idOil-30 special applications

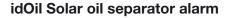




idOil Solar with beacon light

idOil Solar

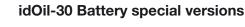
id0il-30



The idOil Solar is a solar powered oil separator alarm for off-grid areas. It can be equipped with a beacon light and/or an internal modem.

In an alert situation, the beacon light will flash and/or an alarm message will be sent to the user's mobile phone or LabkoNet. The idOil Solar control unit has the same features as the idOil-30.





The idOil-30 control unit is also available with a 12 V DC power supply and the option of an internal modem. With the modem an alarm message will be sent to the user's mobile phone whenever an alert situation occurs.

# idSET and idOil control units' main features









|  | idSET-OTM                                    | idSET-34                                     | idOil-30                             | idOil-D30                            | Notes  |
|--|--|--|--------------------------------------|--------------------------------------|--|
| Mounting                               | Wall mounted                                 | Wall mounted                                 | Wall mounted                         | M36 DIN rail mounted                 |  |
| Mains-powered                          | 230 V AC                                     | 230 V AC                                     | 100-240 V AC                         | 100-240 V AC                         |  |
| 12 V DC                                |  |  | idOil-30 Battery                     |                                      | Low power version.   |
| Solar-powered                          |  |  | id0il Solar                          |                                      | For off-grid areas.  |
| Alarm status LEDs                      |  | ×  |                                      |                                      |  |
| Display                                | <ul> <li></li> </ul>                         |  | <ul> <li></li> </ul>                 | v                                    | 4 lines monochrome LCD<br>with backlight. Operation and<br>alarm status indication.  |
| Internal modem                         | v  |  | v -                                  |                                      | SMS alarm information to mobile phone.   |
| Relay output                           | 4 pcs, 1 for each sensor<br>and 1 for faults | 4 pcs, 1 for each sensor<br>and 1 for faults | 2 pcs fully configurable             | 2 pcs fully configurable             |  |
| Sensor input                           | OTM, LIQ and SLU sensors                     | 1-3 any different<br>idOil sensors           | 1-3 any idOil sensors<br>combination | 1-3 any id0il sensors<br>combination |  |
| Continuous<br>measurement              | V  |  |                                      |                                      | Oil layer thickness.<br>Measurement range 0-400 mm   |
| One push button<br>quick commissioning | v  | v  | v                                    | v                                    |  |
| Automatic sensor type detection        | ×  | ×  | <b>/</b>                             | v -                                  | Detects automatically connected sensors and sensor types.  |
| Polarity free sensor connection        |  | <b>~</b>                                     | <b>~</b>                             | V                                    | 2 sensor wires can be connected both ways.   |
| WLAN                                   | <b>~</b>                                     |  | <b>~</b>                             | <b>v</b>                             | Web browser based user interface<br>for settings and configuration.<br>WLAN connection locally with<br>laptop/tablet/smartphone. |
| Data logging                           | v  |  | v                                    | v -                                  | Downloadable log file with time<br>stamp for alarm, alarm reset, power<br>break and maintenance events.                          |
| Service and maintenance diary          | ×  |  | v                                    | ×                                    | Free text input for diary marking.   |
| Alarm repeat<br>24 h setting           | v  | ×  | v                                    | V                                    | Alarm repeats after reset in 24 h if reason not removed.   |
| Adjustable alarm delay                 | V  |  | V                                    | V                                    | Delay adjustable for each sensor.  |
| Ex classification                      | <b>v</b>                                     | <b>~</b>                                     | v                                    | v                                    | II (1) G [Ex ia Ga] IIB<br>ATEX, IECEX, UKEX   |





# OMS-1 alarm device for oil separators

#### OMS-1 oil separator alarm

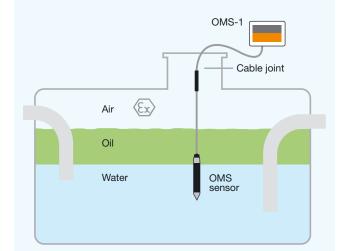
OMS-1 alarm device is specially designed for oil separators.

It indicates when it is time to empty the oil separator, which prevents harmful hydrocarbon emissions from being released into to the sewer system.

OMS-1 control unit and OMS sensor



# Application





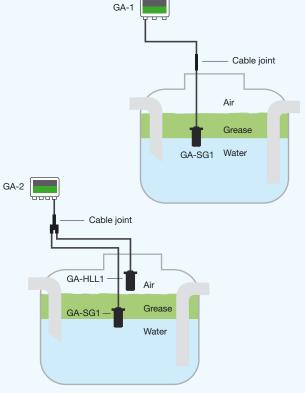
# GA-1/GA-2 alarm devices for grease separators

#### GA-1 and GA-2 grease separator alarms

GA-1 and GA-2 alarm devices are specially designed for grease separators. They indicate when it is time to empty the grease separator, which prevents harmful grease emissions from being released into to the sewer system.



# Application



GA-1/GA-2 devices are not ATEX approved and cannot be used in oil separators.





# Measures for a better tomorrow

Labkotec is a market-leading measurement equipment manufacturer, and related services provider. Our mission is to provide sustainable measurement solutions which enhance our customers business and help them to protect the environment and people.

## Sustainable competence

We are committed to sustainable business and for us, sustainability is a driving force for developing our business to create long-term value and sustainable growth.

We provide sustainable measurement solutions which help our customers not only to protect the environment and people, but also to save energy, water, materials and CO<sub>a</sub> emissions. We work systematically through continuous improvements and the efficient use of materials and resources to minimize the emissions and waste.

In our own operations, sustainability is built around three key elements: people, environment and sustainable growth. Labkotec's comprehensive export product range comprises ice detection systems, alarm devices for oil and grease separators, a wide range of level switches and measurements as well as LabkoNet system for remote on-site monitoring of measurement and alarm information.



Measures for a better tomorrow



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