

5 crucial factors for selecting

A perfect Grease Separator





Every commercial kitchen generating wastewater must have pre-treatment plant to ensure that fat, oil and grease (FOG) are not discharged into the public sewerage network. Otherwise, very greasy wastewater puts the pipe systems and drainage equipment at risk. Grease and oils that are deposited with other wastewater components on the walls of the pipes can lead to corrosion, blockages and noxious smells. Hence, grease separators, also known as grease traps or grease interceptors, have to be installed to separate greasy wastewater. This applies to commercial kitchens in Airports, Hospitals, Restaurants, Hotels, shopping malls and Commercial buildings.

ACO helps you to understand the 5 crucial factors for selecting a perfect Grease Separator.

1 Sizing of the Grease Separator

- The sizing of the grease separator is based on EN1825 Part 2
- The inlet flow rate at peak (Nominal Size) is the basis for sizing the grease separator
- The grease separator can be dimensioned based on 2 criteria

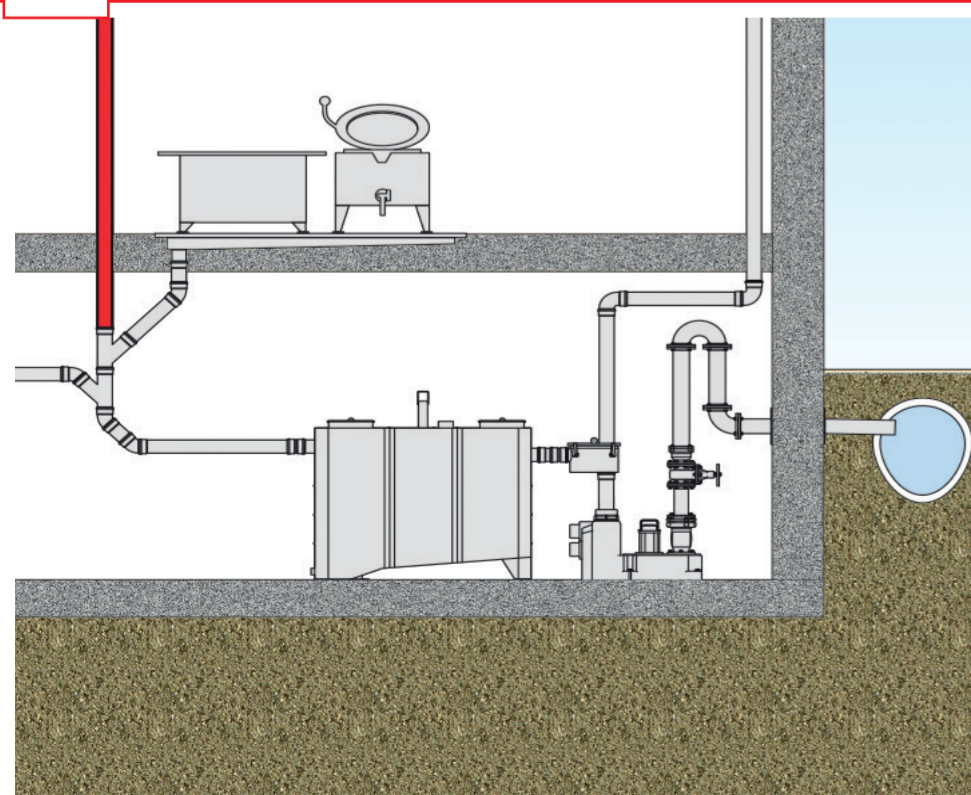


a. Based on total number of meals consumed per day



b. Based on kitchen equipment list

2 Installation Type

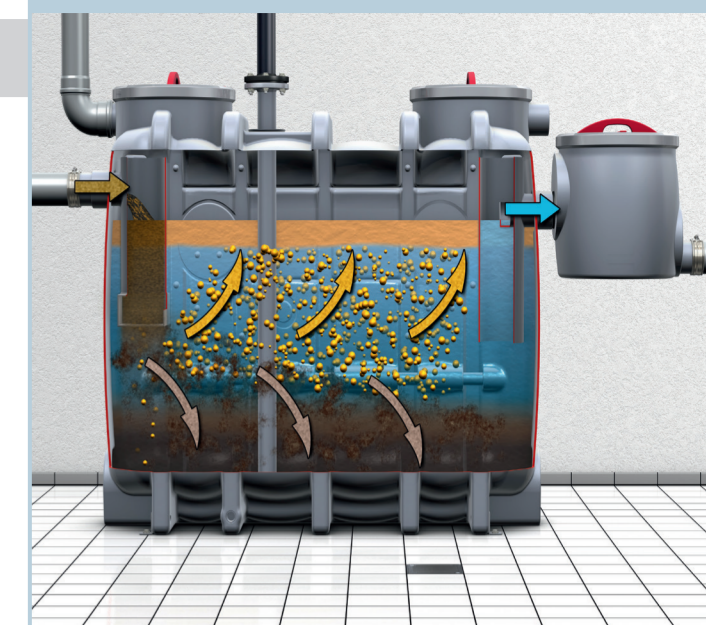


- Grease separator has to be installed one level below the kitchen.
- The flow into the separator and the outflow has to be through gravity.
- There are 2 options for installation
 - a. Above ground
 - b. Below ground
- The installation type has to be selected based on the location of the kitchen, location of sewage treatment plant and the space available at site.
- The distance between the kitchen and the separator has to be as short as possible to avoid accumulation of grease in the pipeline.

3 Product Selection

Above Ground

- If the location has access to disposal truck – A full disposal grease separator without disposal pump can be used. Optionally high pressure cleaning system can be chosen for hygienic and optimal cleaning.
- If the location doesn't have access to disposal truck
 - a. If the total head from the base of grease separator to the location of disposal vehicle access is less than 10m – a full disposal grease separator with disposal pump is recommended. Optionally high pressure cleaning system can be chosen for hygienic and optimal cleaning.
 - b. If the total head from the base of grease separator to the location of disposal vehicle access is more than 10m - partial disposal grease separator is recommended



Below Ground

- The location of the grease separator must have access to the disposal truck
- For better hygiene a full disposal grease separator with option for direct suction can be opted
- High pressure cleaning jet can be equipped for hygienic and optimal cleaning
- Top Cover
 - a. Based on the invert level of the inlet pipe, the height of the top section can be selected
 - b. Select the load class of the cover based on the movement on top of the cover
 - i. A15 – No movement or only pedestrian
 - ii. B125 – Car movement
 - iii. D400 – Fire driveway



4 Installation

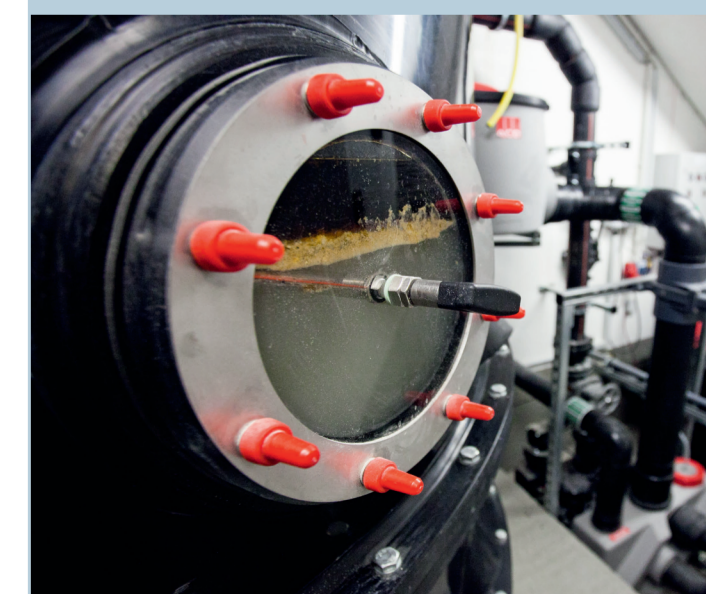
Grease separator has to be installed on a plain surface in a frost-proof area with the average room temperature of around 20 – 30 °C . Proper space around the unit has to be provided, about 50cm all around for proper access and ventilation system or window is also recommended. Proper calming pipe is a must and has to be provided. Drain point close to grease separators is also recommended.



5 Maintenance

Grease separator has to be maintained periodically for efficient functioning and maintenance has to be done as per the recommended guidelines. Improper maintenance can result in inefficiency of separation, clogging the pipes, solidification of grease and sludge inside the system.

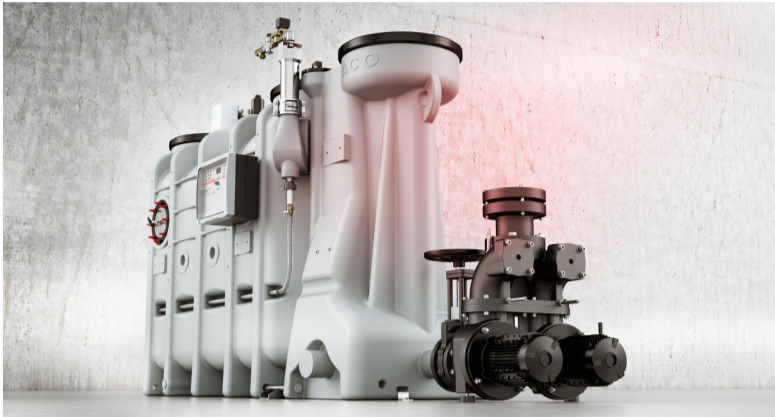
- Full disposal – The entire unit has to be emptied, cleaned and filled back with water before resuming the operation
- Partial disposal – The grease and sludge barrels has to be changed and cleaned everyday



Grease separators need to be adaptable and versatile, and be available in various sizes and materials to meet the enormous range of different industrial and commercial needs.

ACO has many years of experience in the production of grease separators. Its comprehensive product line includes free-standing and underground grease separators. Precise engineering and in-depth expertise guarantee fully developed, quality-assured and completely tested products that satisfy all international standards.

ACO LipuSmart



Smart,

- because the backflow protection is integrated
- because only one vent stack needs to be planned
- because all plant components can easily be integrated into the building control system, thanks to the control unit for the general system

4 functions in one unit

LipuSmart combines all central functions to dispose of greasy wastewater in one product:

- Grease separator
- Sampling unit
- Lifting plant
- Integrated general system control unit

In terms of performance, **LipuSmart** starts from the pole position and expands its technological lead, thanks to numerous optional features:

- Grease layer thickness measurement
- Automatic high-pressure inner cleaning
- Signalling unit with GSM module
- Disposal pump
- Inspection window
- Filling device

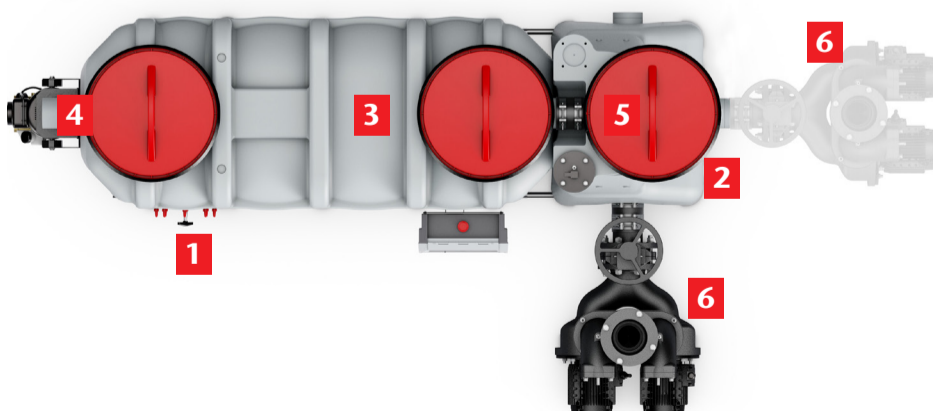
ACO LipuSmart: **the 4-in-1 solution.**

Variability thanks to flexible design

Situation-compatible planning means being able to decide individually every time. Rigid standard solutions limit the necessary scope for action. That is why LipuSmart is designed flexibly.

Of course, LipuSmart is available in all standard grease separator extension stages. The pump technology can be mounted flexibly and therefore redefines on-site installation freedom.

Highly suitable for every installation situation



- 1 Control system for general system
- 2 Tank lifting plant
- 3 Grease separator
- 4 Vent stack
- 5 Integrated sampling
- 6 Flexible pump unit

ACO. creating

the future of drainage

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