

REWATEC™

Grease Separators



CE

Maintenance Guide

Rewatec Grease Separators

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To Safeguard Warranty Please
Ensure You Are Using The Latest
Maintenance Guide:

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Introduction

The primary function of a grease separator is to separate greases and oils of vegetable or animal origin from waste water (such as in commercial kitchens and large catering establishments) and retain the separated liquids. In particular, the following **must not** be drained through a grease separator— wastewater containing faeces, rainwater and wastewater containing light liquids (petrol, diesel, fuel, heating oil).

The separated liquids **must** be removed regularly, using a licensed effluent disposal contractor (your contracted service provider), to ensure that the separator operates as efficiently as possible.

The natural grease and oil separating process from gravity fed waste water depends on the storage, or 'dwell', time within the separator chamber and the temperature of the influent, as well as many impediment factors which should be taken into consideration such as the density of the grease/oil and the nature and use of cleansing and rinsing agents. Guidelines are being established by Technical Committee CEN/TC 165WG8 in a draft European Standard for Grease Separators (not yet available as a public document). Tests carried out by Premier Tech and based on the maximum flowrate into the separator (l/sec) have shown that as the working volume reduces by the accumulation of the separated oil, so the separating efficiency reduces.

Another major influencing factor on the efficiency of separator systems is sediment. Grease separators are usually designed as liquid/liquid separators unless the specification has determined a requirement for the separator/separator system to store a volume of sediment. This can be accommodated within a combined liquid/sediment separator where the storage volume is increased accordingly. However, if the design of the drainage system can allow the sediment to be separated and stored upstream of the grease separator, in catch-pits or sediment separators, the system would function more efficiently. The volume for sediment, in litres, is generally a minimum of $100 \times NG$. Again, settled sediment **must** be removed regularly to ensure optimum efficiency of the separator system.

REGULAR MAINTENANCE OF SEPARATOR EQUIPMENT WILL ENSURE IT OPERATES AS INTENDED WITH MINIMUM RISK OF POLLUTION.

Maintenance Inspections

Grease separators are used in widely varying circumstances where different cooking methods, choice of oils/fats and menu types are employed. Therefore, some will require very frequent maintenance and others will have substantially longer intervals before any maintenance (emptying) is required. However, regular maintenance *inspections* should be carried out. The frequency of inspection, emptying and cleaning should be determined by the grease and sludge capacity of the separator and operational experience. Unless otherwise specified, separators should be emptied, cleaned and refilled with clean water at least once a month and, preferably, every two weeks. The owner of the Premier Tech grease separator is entirely responsible for its operation and ensuring that the effluent quality does not breach any Discharge Consent Standards. It is advisable to set up a 'Service Agreement' with an effluent disposal contractor who can provide 'automatic' and regular maintenance and advise you if any problems with the system occur. The owner is reminded that the existence of a 'Service Agreement' does not necessarily transfer responsibility for general maintenance which must be conducted in accordance with this guide.

Maintenance Procedures

1.0 Health and Safety

The maintenance procedures described here should be read and fully understood by the operator (competent person) before commencing work. Appropriate personal protective equipment should be used (gloves, goggles, waterproof clothing etc.,) particularly when handling filters which have been in contact with grease and oily sediment.

Before any work commences always identify the grease separator and its associated manhole cover(s), and cone off or barriers around the entire area.

DO NOT ENTER THE TANK

2.0 Maintenance immediately following installation

(Commissioning the separator)

Silt and other construction debris can accumulate in the grease separator during its installation and whilst associated works are in progress. After isolating the separator from the drainage system remove the silt as follows.

Cylindrical Multi Chamber Grease Separators:

- 2.1 Using a licensed effluent disposal contractor (your contracted service provider) empty the entire contents of the grease separator ensuring the complete removal of silt. Great care must be taken to ensure that all chambers are emptied equally so that no baffle is subjected to a head of pressure from the presence of silt. Fill the grease separator with clean water up to the outlet invert level.

NOTE: *Filling the grease separator with clean water is vital to performance requirements.*

3.0 Incremental Maintenance

If, following maintenance inspections, the grease separator is found to be storing the maximum volume of grease or the maximum volume of sediment, inform your licensed effluent disposal contractor to arrange emptying.

3.1 Procedure

Apply the Health and Safety requirements detailed in Section 1 before commencing any work.

Isolate the separator from the drainage system either by closing pre-installed valves in the upstream and downstream manholes or by securely fitting proprietary pipeline stoppers.

Cylindrical Multi Chamber Grease Separators:

3.1.1 Using a licensed effluent disposal contractor (your contracted service provider) empty the entire contents of the grease separator ensuring the complete removal of sediment. Great care must be taken to ensure that all chambers are emptied equally so that no baffle is subjected to an excess head of pressure from the presence of silt. Fill the grease separator with clean water up to the outlet invert level.

NOTE: *Filling the grease separator with clean water is vital to performance requirements.*

Replace manhole covers and remove the cones and/or barriers from the worksite.

Your grease separator is now ready for normal operation.

