



This information is brought to you by  
Owls Hall Environmental working in  
partnership with Klargester products.



*Excellent Treatment*

**0845 375 1801**  
[www.ohel.co.uk](http://www.ohel.co.uk)

---

# ENVIROCEPTOR FORECOURT SEPARATORS



## Introduction

The Klargester Enviroceptor has been developed to comply with the European Standard EN 858 specifically to contain a spillage from a 7600 litre road tanker compartment.

The Enviroceptor is designed for installation in petrol filling station forecourts and similar applications. The Environment Agency has produced Pollution Prevention Guidelines PPG3 that outlines the main design requirements and legislative references for forecourt separator applications in England and Wales.

The function of the separator is to intercept hydrocarbon pollutants such as petroleum and oil and prevent their entry to the drainage system, thus protecting the environment against hydrocarbon-contaminated surface water run-off and gross spillage.

## Classification

The Enviroceptor is designed to meet Class 1 or Class 2 discharge levels, as outlined by the new European Standard for light liquid separators.

Petrol station forecourts are high-risk areas where there is a significant chance of petrol or oil spillage. The separator is therefore required to have a minimum capacity such that it can contain the maximum contents of a spillage from the compartment of a fuel delivery tanker on the forecourt.

## Class 1 Separator

This type of separator is required where discharge is expected to be to sensitive waters and where the hydrocarbon pollutant concentration from the unit is required to be reduced to 5mg/l or less, as measured under the test conditions. To meet these design criteria the Klargester Enviroceptor includes a closure device and a coalescer.

A float-controlled closure device is incorporated to ensure that in the event of a major spillage, the Enviroceptor would contain the pollutant. The closure shuts off when the water is displaced by the less dense hydrocarbon pollutants, protecting the out-fall from gross oil contamination.

## Class 2 Separator

Where a forecourt separator is required for discharge to less sensitive locations such as to a foul sewer, a Class 2 separator can be used. This design enables the unit to provide a quality of effluent such that the hydrocarbon pollutant concentrations discharged is reduced to 100mg/L or less. Therefore, for these less sensitive discharge applications a media covered coalescer is not required. The closure device incorporated within the unit is still included to ensure that in the event of a major spillage the pollutants are contained within the separator, preventing gross oil pollution of the discharge location.

## Operation

Enviroceptor operation ensures that the flow cannot exit the unit without first passing through the coalescer-assembly.

In normal operation, the Enviroceptor has sufficient capacity to provide storage for separated pollutants within the main chamber, but is also able to contain up to 7,600 litres of pollutant arising from the spillage of a fuel delivery tanker compartment on the petrol forecourt. The Enviroceptor has been designed to ensure that oil cannot exit the separator in the event of a major spillage of this type. In the event of a major spillage the Enviroceptor should be emptied immediately.

## Construction

The Klargester Class 1 and Class 2 Enviroceptor units have been designed to provide effective and reliable hydrocarbon pollutant separation within a high quality GRP tank. The product is extremely robust, light in weight, easy to transport and to install. The unit is rot and corrosion proof and structurally designed for a concrete or granular backfill surround. The GRP tank is designed to provide a minimum life of 30 years.

## Installation

The unit should be installed on a suitable concrete base slab and surrounded with a concrete backfill. Structural grade units can also be supplied suitable for installation within a granular backfill (i.e. pea gravel). Please specify unit required when ordering.

If the Enviroceptor is to be installed within a trafficked area, then a suitable cover slab must be designed to ensure that loads are not transmitted to the unit.

The Enviroceptor should be installed and vented in accordance with Health and Safety Guidance Note HS(G)41 for filling stations, subject to Local Authority requirements. Please refer to Installation Manual PD0107 for more detailed information.

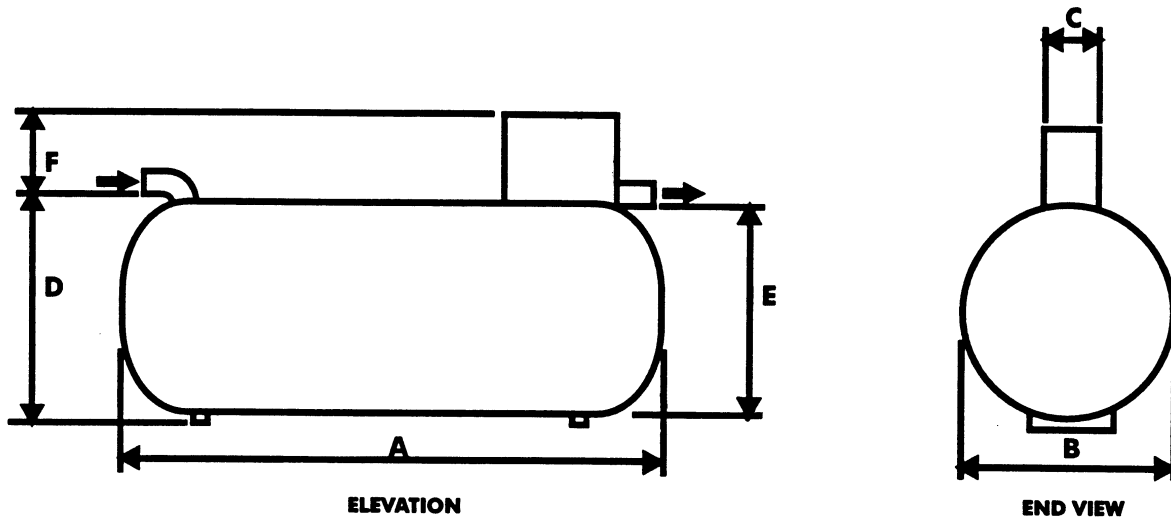
## Maintenance

The hydrocarbon pollutants and silt that build up within the separator should be removed periodically to ensure that maximum effectiveness of the unit is maintained.

## Oil Level Alarm

Enviroceptors can be fitted with an Oil Level Alarm which gives a visual indication of the separator status and an additional audible alarm when the Enviroceptor requires emptying. An oil probe inside the Enviroceptor triggers the alarm when the oil/water interface reaches a predetermined level. For normal operation, the probe should be positioned 150mm below the static water level. The standard mains powered Alarm Control Unit is designed to be mounted indoors in a non-hazardous area. Other versions are also available including battery powered unit and telemetry options

## 'ENVIROCEPTOR' FORECOURT SEPARATORS



Enviroceptor Class	Backfill Type	Total Capacity (L)	Drainage Area (M <sup>2</sup> )	Max. Flow* Rate (l/s)	Main Dimensions (mm)								
					Length (A)	Dia. (B)	Access Shaft Dia (C)	Base to Inlet Invert (D)	Base to Outlet Invert (E)	Std. Fall Across Unit	Min Inlet Invert (F)	Std. Pipe-work Dia	Empty Weight (Kg.)
I	Granular	10000	720	15	3915	2020	600	2285	2235	50	600	160	780
II	Granular	10000	720	15	3915	2020	600	2285	2235	50	600	160	780
I	Concrete	10000	720	15	3915	2020	600	2180	2130	50	600	160	620
II	Concrete	10000	720	15	3915	2020	600	2180	2130	50	600	160	620

\* With standard 160mm diameter PVCu pipework

The above table is based on the assumption that interconnecting pipework does not impede flow through the separator and the drainage system as a whole is not adversely affected.

Invert depth (F) can be increased in increments of 500mm from by use of a proprietary extension neck to a maximum of 2 m.

Please indicate the inlet drain invert required when specifying units.

Please contact the Sales Department for advice on the options available.

### Quality

All Klargester products are manufactured under BS EN ISO 9002 Quality Management Systems accreditation. Local Authorities, National Environmental Regulatory bodies and Licensing Authorities including the London Fire & Civil Defence Authority accept the Klargester Enviroceptor designs.

### Product Selection

Klargester have specialist technical representatives operating throughout the UK who can offer on-site advice.

To select the correct Enviroceptor for your application refer to the table above or alternatively consult our Technical Sales Department at our Head Office in Aston Clinton (+ 44 0 1296 633014).



Klargester Environmental  
College Road North, Aston Clinton, Aylesbury, Bucks, HP22 5EW  
Tel: +44 (0) 1296 633014 Fax +44 (0) 1296 633001  
www.klargester.co.uk e-mail:uksales@klargester.co.uk



### Manufacturing and distribution units also at:

Klargester Scotland: +44 (0) 1355 248484  
Klargester Ireland: NI +44 (0) 28 302 66799 ROI +353 (0) 48 302 66799

In keeping with the Company policy of continuing research and development in order to offer our clients the most advanced products, Klargester reserves the right to alter specifications and drawings without notice