

# | ECOSTOP

PETROLEUM SPILL CONTROL  
SYSTEM

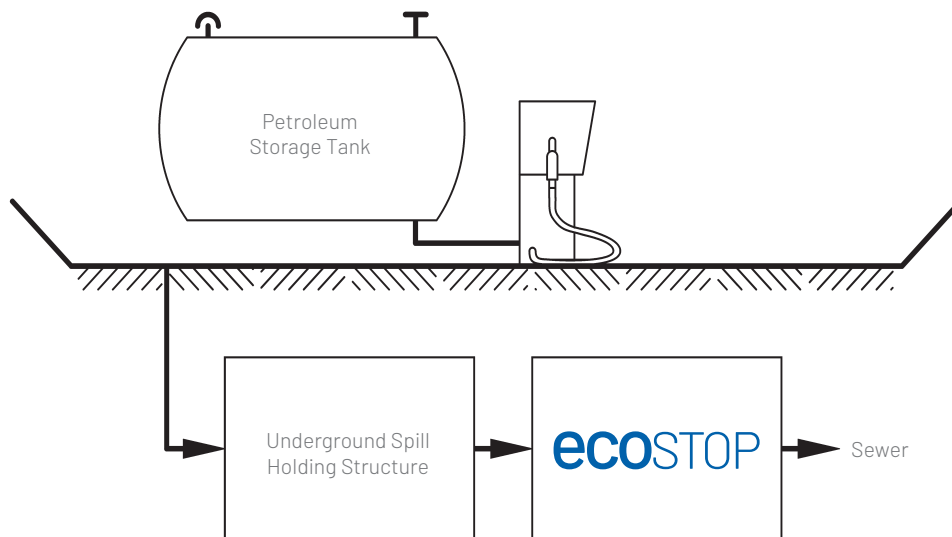
PRODUCT OVERVIEW  
INSTALLATION MANUAL  
OPERATION & MAINTENANCE



# ECOSTOP SPILL CONTROL SYSTEM THE CLEAR IDEA.

**Our single oil droplet can contaminate one hundred liters of pure water.  
With ecoStop, spill control is safer than ever before.**

Did you know that one single oil droplet can contaminate one hundred liters of pure drinking water? Imagine the catastrophic consequences of an uncontrolled oil spill to our environment. Not to mention the liability, cost and fines for the remediation of site spills. Ecostop can prevent this scenario from occurring by detecting a spill and shutting the drainage system, thus keeping the spill on-site.



**Today's environmental legislation is hard to comply with.  
ecoStop meets tomorrow's standards today.**

One basic requirement of our Ecostop spill control equipment is that it is absolutely watertight. Every shut-off valve is tested at a pressure of 0.5 bar or 16 feet of total dynamic head. Designed with future standards in mind, Ecostop far exceeds the tough European standards outlined in DIN 1999 and EN858. The outstanding test results achieved at noted testing institutions speak of the excellent performance of the Ecostop Spill Control System. Looking to the future, Ecostop will be a valuable investment and a major contribution in protecting our environment into the new millenium.

**Can your company afford the cost of a major spill?  
With ecoStop you can!**

The costs associated with an oil spill are high, not just for our environment but also for your company or client. Ecostop provides the safest and most cost-effective method to control spills. Consider Ecostop as your spill control system and insurance against the extreme cost of a major disaster.

## ECOSTOP AT A GLANCE



### **Catastrophic oil spill control**

An inlet shut-off valve (patent pending) makes ecoStop the industry standard providing the highest environmental protection against discharge of petroleum spills at your facility.

### **Watertight to 0,5 bar pressure (16 feet TDH)**

The outstanding test results achieved at noted testing institutions show that ecoStop will be able to meet even tougher future standards.

### **High operational reliability**

No external energy supply is required, no electrical parts and constructed only of stainless steel components.

### **Easy to install**

The system prepackaged in a standard precast concrete manhole.

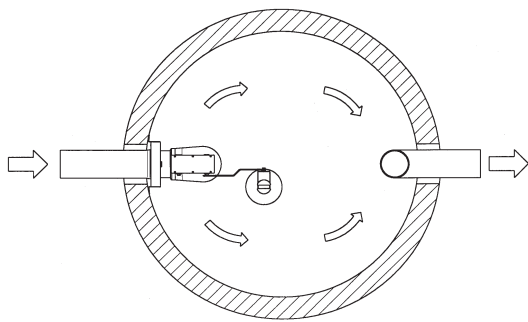
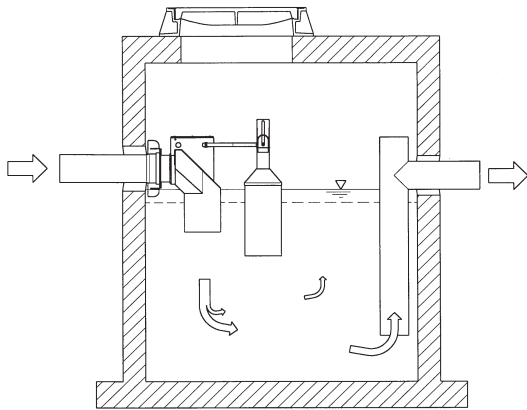
### **Easy to retrofit**

To existing concrete separators or manholes.

### **An investment that is built to last**

Due to the use of stainless steel components and high strength precast concrete host.

## WORKING PRINCIPLE



### General

The Ecostop Spill Control System (patent pending) is designed to control spills at petroleum storage or fueling facilities. A spill situation shuts down Ecostop's closure valve, preventing the discharge of free oil to municipal sewers or direct discharge outfalls. Ecostop maintains the spill on site where it can be contained either below grade (i.e. an underground storage tank or a large diameter pipe) or in an above grade, diked area. The capacities of this upstream storage reservoir should be large enough to accommodate typical amounts of a tank truck oil-spill (with an additional capacity, safety factor).

The downstream Ecostop tank is equipped with Ecostop's automatic shut-off valve (patent pending). This float actuated closure device stops the flow through the system when the maximum oil storage capacity or a certain liquid level in the Ecostop chamber is reached. In its closed position, the valve is watertight up to 0.5 bar (5m water column). The Ecostop detects spills automatically and therefore eliminates the most common failures in traditional spill control systems, human error. In the event of a minor petroleum build-up or a catastrophic type spill, changes in the liquid levels can be monitored by accurate and reliable liquid level sensor alarms.

### Installation

The system is installed in-line and downstream from any segregated petroleum containment drainage area treating runoff.

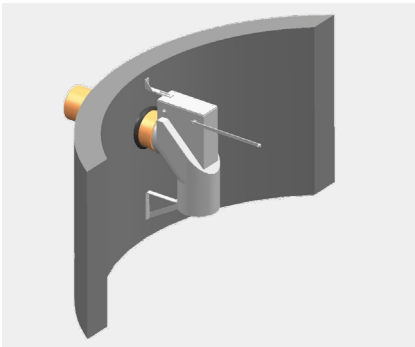
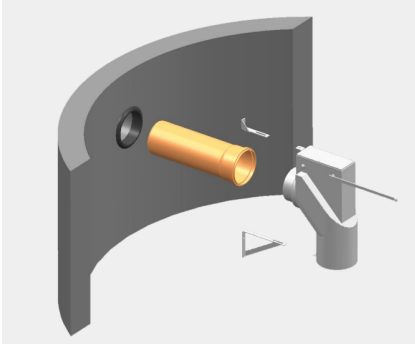
Ecostop comes pre-installed in a standard precast concrete manhole or in an Ecosep Oil/Water Separator. Ecostop can be retrofitted to an existing drainage system.

### Standard Maintenance

Any facility or wite, where the potential for a petroleum spill exists:

- Gasoline stations and other fueling facilities
- Electrical transformers
- Oil storage areas
- Transportation fueling systems

# INSTALLATION



## Installation of the spill control valve

Components required:

- spill control valve
- mounting bracket/1
- mounting bracket/2
- compression gasket NBR
- PVC pipe

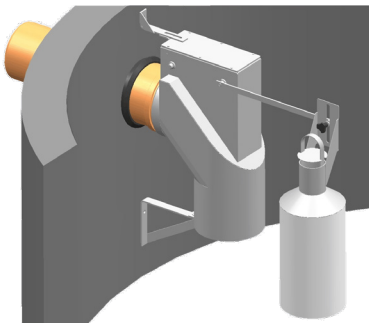
1. Core hole for inlet pipe at predetermined elevation.
2. Mount both brackets to the valve.
3. Insert compression gasket at the inside of the manhole. Lubricate and push the HDPE pipe from the inside of the manhole into the inlet boot.
4. Lightly lubricate the pipe stub of the valve and push it into the bell section of the PVC pipe and make marks for 2 anchor holes.
5. Drill 2 anchor holes using a 10 mm masonry drill bit to desired depth.
6. Insert provided heavy duty anchors.
7. Secure valve with 2 stainless steel bolts that are provided.

## Installation of the float

Components required:

- float
- push-pin
- washer

Secure float with provided push pin and washer.  
Before the float is mounted to the spill control valve, the tank must be filled with clean water!

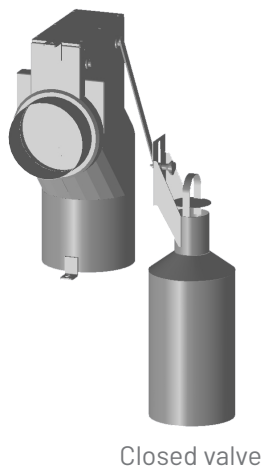
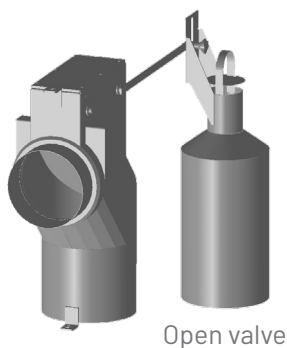


## TECHNICAL DESCRIPTION

### Oil spill control

The automatic shut-off valve stops the flow from an above-grade area either when the maximum oil storage capacity is reached or when a certain liquid level in the separation chamber is exceeded. In its closed position, the valve is tight up to 0.5 bar (5m-water column) or 16 feet of total dynamic head pressure. This makes the Ecostop the only spill control system to provide maximum security for the facility owner against unexpected, unpredictable and catastrophic petroleum spills.

## OPERATION & MAINTENANCE



### Maintenance of spill control valve and float

The spill control valve at the inlet operates in two working conditions:

**Open valve:** Float lever is in a horizontal position, the float is floating in water.

**Closed valve:** Float lever is pointing downwards, the float is submerged.

During operation the valve is open, water is admitted to the gravity separator. The automatic shut-off valve stops the flow from the grit chamber either when the maximum oil storage capacity is reached or when a certain liquid level in the separation chamber is exceeded. To set the valve back to its operating condition after a spill, remove the push pin and detach the float from the float lever. Lift out and empty the float. Pump the accumulated oil in the separation chamber and refill the system with fresh water. Use the push pin to connect the float to the float lever again. Make sure to release the float carefully so that it is not sinking. The valve should now be in its operating condition again.

### Standard Maintenance

Detach the float from float lever by removing the push pin. Check whether the float lever is free moving and the valve can be opened and closed easily. Check the condition of the gasket. To clean the inside of the valve remove lid and rinse with high pressure washer. If necessary, lubricate moving parts.



**SCHLÜSSELBAUER**   
ECOTECHNIC

Illustrations may differ from the original.  
Version 07/2022: Subject to errors, technical changes and typographical errors.

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