

ESK™

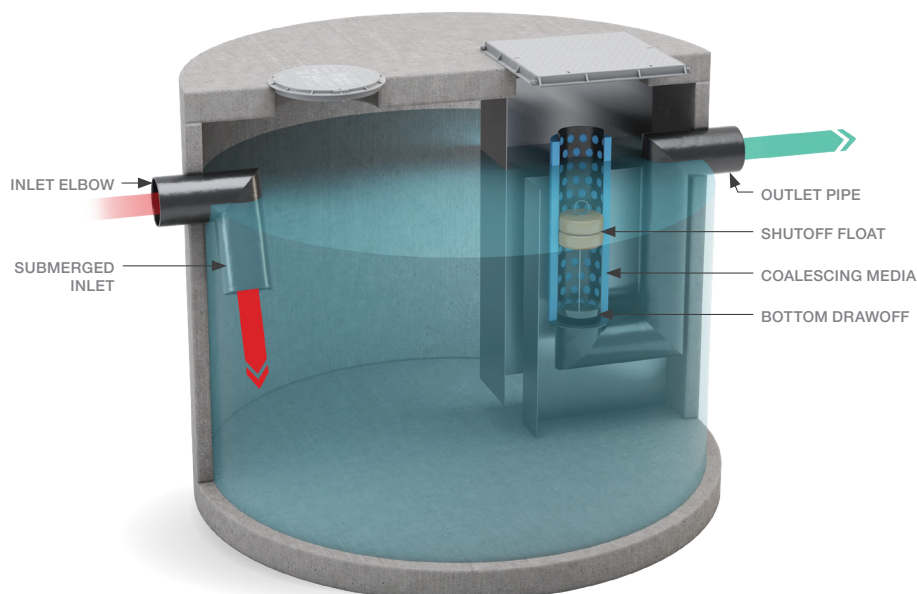
Oil/Water Separator with Automatic Shutoff Valve

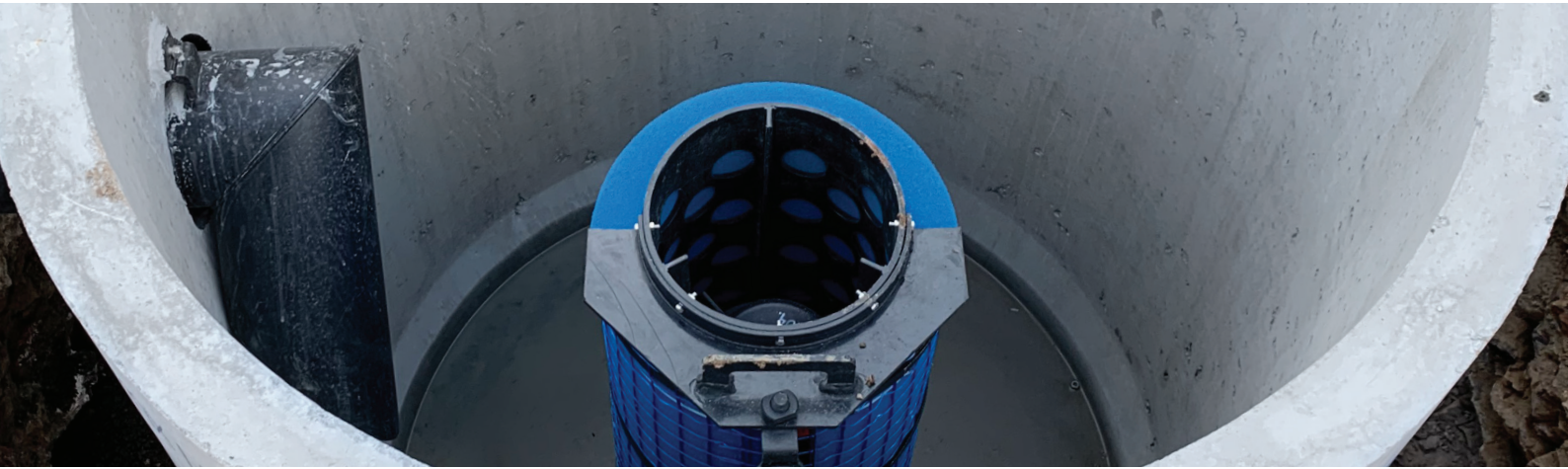
The ESK™ is a passive high efficiency coalescing separator that removes free oil from contaminated stormwater runoff and has a built-in shutoff valve to prevent spills and storage capacity excess exiting the device. The device is ideally suited for sites where specific effluent targets are specified, or for sites where removal of oil and grease is the greatest concern (e.g. fuel stations, fuel distribution stations). It is typically sized to remove oil droplets as small as 10 microns and achieve an effluent total petroleum hydrocarbon concentration of 5 mg/L or less.

How does it work?

The design of the separator calms down the flow of polluted water and at the same time forces the division into oil (stored in the separator) and water. Untreated runoff flows enters the ESK™ and is directed downwards via an angled inlet pipe, allowing gravity to start the separation process. Petroleum derivatives lighter than water float to the surface, where they accumulate forming a layer. Small mineral oil droplets that do not have adequate buoyant force form larger drops

(coalescence) during their flow through the coalescence material, which facilitates their separation. The submerged outlet prevents the escape of separated contaminations into the receiver while allowing treated water to exit the system. When the volume of captured oil exceeds the maximum design capacity or when a spill occurs onsite, an automatic shutoff check valve will close to prevent effluent leaving the device.





Features

- Separates free oil from water using gravitational and coalescing technology
- Provides discharge of oil concentration as low as <5 mg/L PPM with an oil droplet size of approx. 10 µm
- Automatic shutoff valve
- Optional alarm system

Benefits

- Compliant with European and British EN 858 class 1 standard
- Standard products accommodate a large variety of flows
- Easy to install and maintain
- Reusable and washable media
- Smaller footprint and depth than traditional oil/water separators



Configurations and Applications

The ESK™ system is available in several precast concrete manhole sizes, allowing for a wide variety of treatable flow rates, spill capacities, pipe sizes and inlet/outlet configurations. This design flexibility makes the ESK™ an ideal solution for a wide range of applications such as:

- Commercial and industrial development, infill and redevelopment and stormwater quality retrofit applications
- Service stations, re-fuelling zones, vehicle wash-down stations, power stations, machine shops etc.
- Special projects: Highways, airports, seaports and military installations

Maintenance

Inspection is recommended after each major storm event and immediately after an upstream oil, fuel or other chemical spill. No confined space entry is required.