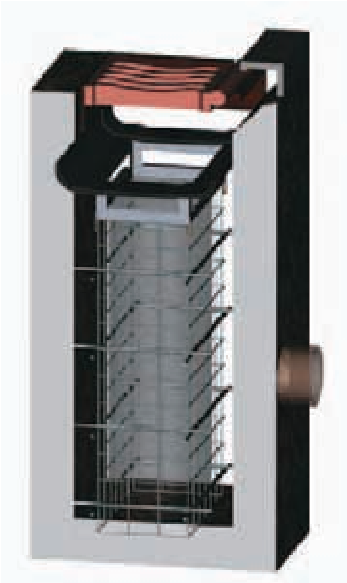
Enviropod®
Catchpit Filter

Enviropod® – Catchpit Filters

Enviropod® is a filter insert that is easily installed into new and existing gully pits / catchpits without the need for construction. Enviropod® filters consist of a galvanised steel supporting frame, plastic inflow seal, internal bypass mechanism and a filter bag that is easily removed and emptied during maintenance. Enviropod®'s re-usable, polyester filter bag is interchangeable and bag selection is dependant on the pollution generated from each specific site.

In addition to being a stand alone treatment device for small catchment areas, Enviropod® is effective as a pre-treatment device for use in a treatment train with hydrodynamic separators, filtration, ponds and wetlands. In many cases, it is often the most practical solution for retrofits.



Features	Benefits
• High treatable flow rate.	• High removal efficiency of gross pollutants and suspended solids, including particulate-bound pollutants such as heavy metals, oil / grease and nutrients.
• Effective source capture of pollutants.	• Prevents blockages and reduces maintenance on stormwater infrastructure. Allows accurate identification of pollutant hotspots and illegal discharges.
• Requires no construction or modification of existing infrastructure.	• Allows filters to be affordably retrofitted or applied to any urban environment.
• Available in a range of sizes to suit pits from 450mm to 1200mm being either square, rectangular or round with a minimum depth of 300mm.	• Able to be adapted for a range of catch pit configurations.
• Low capital cost gross pollutant removal.	• Cost efficient compared to in-line or end-of-line systems.
• Large storage capacity per catchment area.	• Ensures maintenance and "life cycle" costs are kept to a minimum.
• Maintenance is performed by induction (preferred) or by hand.	• Does not require expensive, specialised maintenance equipment.
• Enviropod® is ideal as part of a treatment train or as a pre-treatment to filtration systems and wetlands.	• Reduces maintenance costs and increases infrastructure longevity. Can be installed to keep captured pollutants dry.
• Enviropod®'s patented internal bypass does not utilise any moving parts.	• Prevents system failure and premature bypassing of contaminated stormwater.
• Negligible headloss through the system.	• Does not significantly affect the hydraulic efficiency of existing infrastructure.
• Independently tested and approved throughout New Zealand and Australia.	• Local performance verification.

Design and Operation

Enviropod® consists of a filter bag supported by a filter box and structural cage. Modular plastic deflector panels attach to the filter box and guide the flow of water to the filter bag. The filter bag captures pollutants and allows the water to pass through to the outlet pipe. Openings in the filter box allow water to bypass the filter bag during high flow conditions to prevent surface flooding.

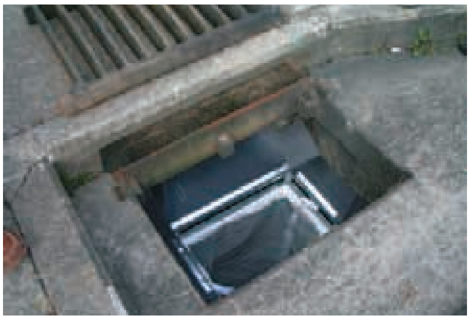
The standard filter bag is 200 micron, monofilament polyester material that is precision woven. The filter medium has a smooth and slippery surface which allows filtered sediments to be easily washed from the filtration surface. In a high flow situation, this will serve as a self cleaning mechanism.

Though 200 micron polyester filter mesh bags are supplied as standard, a range of sizes from 4000 micron (4mm) pore size down to 100 micron (0.1mm) pore size are also available on request.

Optional bags of absorbent material can be placed inside the filter bag to capture oil and grease.

Configurations

There are two standard configurations as shown below.



Drop-in Catchpit Enviropod®

Curb Inlet Manhole Enviropod®

Drop-In Catchpit Enviropod® is the common configuration that can be installed by contractors. Curb Inlet Manhole Enviropod® is a custom unit due to the variable nature of the receiving pits, offsetting of the splay curb blocks and requirement for the unit to be installed through the sidewalk manhole. For these reasons installation can be complex and time consuming and therefore must be installed by the supplier.

Dimensions

Humes Item Code	Description	Receiving Pit Width mm	Receiving Pit Depth mm	Treatable Flow l/s	Bypass Capacity l/s	Availability Indication*
60290	EP 675 x 450	600-700	380-600	up to 10	55	1-2 Days
60291	EP 450 x 450	350-460	400-460	up to 10	38	1-2 Days
60294	EP Curb Entry**	Custom	Custom	Custom	Custom	6-8 Weeks

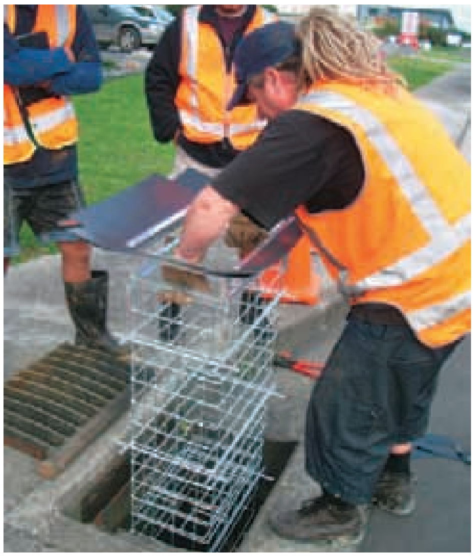
Accessories

Humes Item Code	Description	Availability Indication*
60295	EP Filter Bag – 100 micron	2-3 Weeks
60296	EP Filter Bag – 200 micron***	1-2 Days
60297	EP Filter Bag – 400 micron	2-3 Weeks
60298	EP Filter Bag – 1000 micron	2-3 Weeks
60299	EP Oil Absorbent Pouch	2-3 Weeks

*Small quantities, always confirm availability for large quantities
**Site specific

***Standard Enviropod® filter bag

Installation

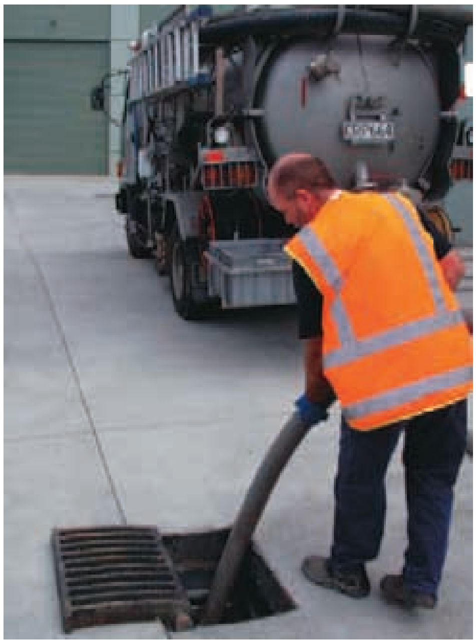


Installation of the standard drop-in Enviropod® is a straight forward procedure. No modification of the receiving catchpit is required though for existing pits the sedimentation chamber must be cleared of any accumulated debris prior to fit-out.

The Enviropod® cage is cut to suit the depth of the receiving pit and deflector panels are cut to size using a box-knife and straight edge to fit the pit opening. Polyurethane sealant is applied if necessary to ensure a watertight seal around the filter box. The Enviropod®'s filter bag is then fit into the filter box. Enviropod® is now ready for action.

For more detailed information regarding Enviropod® installation contact your nearest Humes Sales Centres or alternatively visit the Humes' website.

Maintenance



The system must be monitored and maintained in accordance with relevant local authority guidelines.

Enviropod® installations vary due to the vast number of catchpit configurations and site conditions. Typically 200 micron filters should be serviced every three months, depending on local site conditions and number of vehicle movements. The frequency of maintenance services should be reviewed at the completion of each service and modified if pollutant loadings deem this necessary. At the required maintenance interval the contaminants need to be removed from the filter bags and disposed of appropriately.

The maintenance crew is responsible for disposing of debris in accordance with all applicable regulations and is responsible for following all applicable regulations, including confined space entry requirements.

Maintenance utilising a vacuum inductor truck is the preferred option for cleaning Enviropod® filters. Hand maintenance is discouraged as it can lead to damage of the filters and has Health and Safety implications due to sediments often being highly contaminated. Filters are also capable of storing a large weight of material.

Contact Humes Pipeline Systems for more information or to order Enviropod® bags and oil absorbent pouches.

Humes Pipeline Systems is a distributor of Enviropod® for Stormwater 360

ENVIROPOD

HUMES