

Trawl Sac screening system, screening down to 6mm with no moving parts

Key Features & Benefits:

- Flexible trawl sac arrangements to suit requirements
- Suitable for a wide range of applications
- Nose boxes manufactured from either 304L or 316L Stainless Steel

How We Create Value:

- Efficient distribution of effluent to the filter bed
- Simple, low cost operation
- Easy installation/retrofit
- Reduces works maintenance



The Copatrawl™ sac screening system, screening down to 6mm with no moving parts, using disposable trawl sacs. The Copatrawl™ design can be made to fit into most sewage treatment applications, be it retrofit into an existing works or as part of a new scheme.

Applications

The primary application of the Copatrawl™ design is on settled sewage, protecting traveling filter arms on rectangular trickling filters and improving the integrity of the works by protecting the filter arm sparge nozzles from blockages. Copatrawl™ design applications include screening storm overflows, storm tanks and final effluent.



How it Works:

The Copatrawl system can be installed directly into the flow path of the fluid being screened. Solids are retained in the sac, therefore preventing downstream problems such as clogging of trickling filters or the pollution of surface waters following a storm event. The Copatrawl screen provides much larger flows than its sister product, the CopaSac® screen. Each trawl sac can screen 150l/s.

The Copatrawl technology has been proven to reduce works visit frequency and provide better distribution of effluent to the filter bed. It is recommended that a lifting davit should be used as a minimum requirement, facilitating removal of the trawl sac from the flow chamber.

Typical Applications

- Filter arm protection on trickling filters
- Storm overflow screen
- Emergency overflow screen
- Filter protection (e.g. tertiary disc filters)
- Screening of final effluent
- Storm tank discharge



General Technical information

The modular Copatrawl design allows them to be retrofitted to almost any configuration and in most locations on a sewage treatment works.

The disposable trawl sac is attached to a stainless steel nose box by hooks. The nose box is situated in a modular GRP slider section for easy removal.

The trawl sac should be disposed of when it is about a quarter full. A draw cord ensures that the clean screenings remain within the trawl sac.

Other Accessories

- Lifting davits
- Hand stop plates
- Walkways
- Wheelie bins for collection and draining of used Copatrawls

Technical detail

The maximum recommended flow rate is 150 l/sec/ trawl sac. However, there is no limitation on the number of trawls that can be used, other than the space requirement. Average trawl change frequency (settled sewage) is 3-4 events.



Materials of Construction:

Copatrawl Sacs:

Fixed weave, polypropylene netting
Sac Size – 3,200mm circumference x
2,000mm long

Nose Boxes:

Stainless Steel

Fixed Framework and Nose box guides:

High quality pultruded GRP sections

Fixings:

Stainless Steel

Recommended Lifting Data:

Safe working load: 300kg
Lift height: 3.2m above suitable
disposal container
(i.e. Skip).

A Copatrawl screen can be successfully used on the following:

- Settled primary sewage
- Final effluent
- Stormwater overflows
- Settled stormwater

Optimum distance from nose box Inlet invert to the outlet invert is 500mm. Above 500mm a sac support grid may be required; less than 500mm the trawl sac life & capture capacity may be reduced. The top water level should ideally not exceed the nose box invert level.

The Copatrawl sacs are available in a variety of mesh sizes: 6mm, 7.5mm, 12mm, and 25mm. Mesh size is dependent upon the application as following table.

Recommended Mesh & Application

Process	6mm	7.5mm	12mm	25mm
Settled Primary Sewage	●	●	●	
Final Effluent	●	●		
Discharge from Storm Tanks	●	●	●	
Storm Overflow	●	●	●	●
Emergency Overflow	●	●	●	●