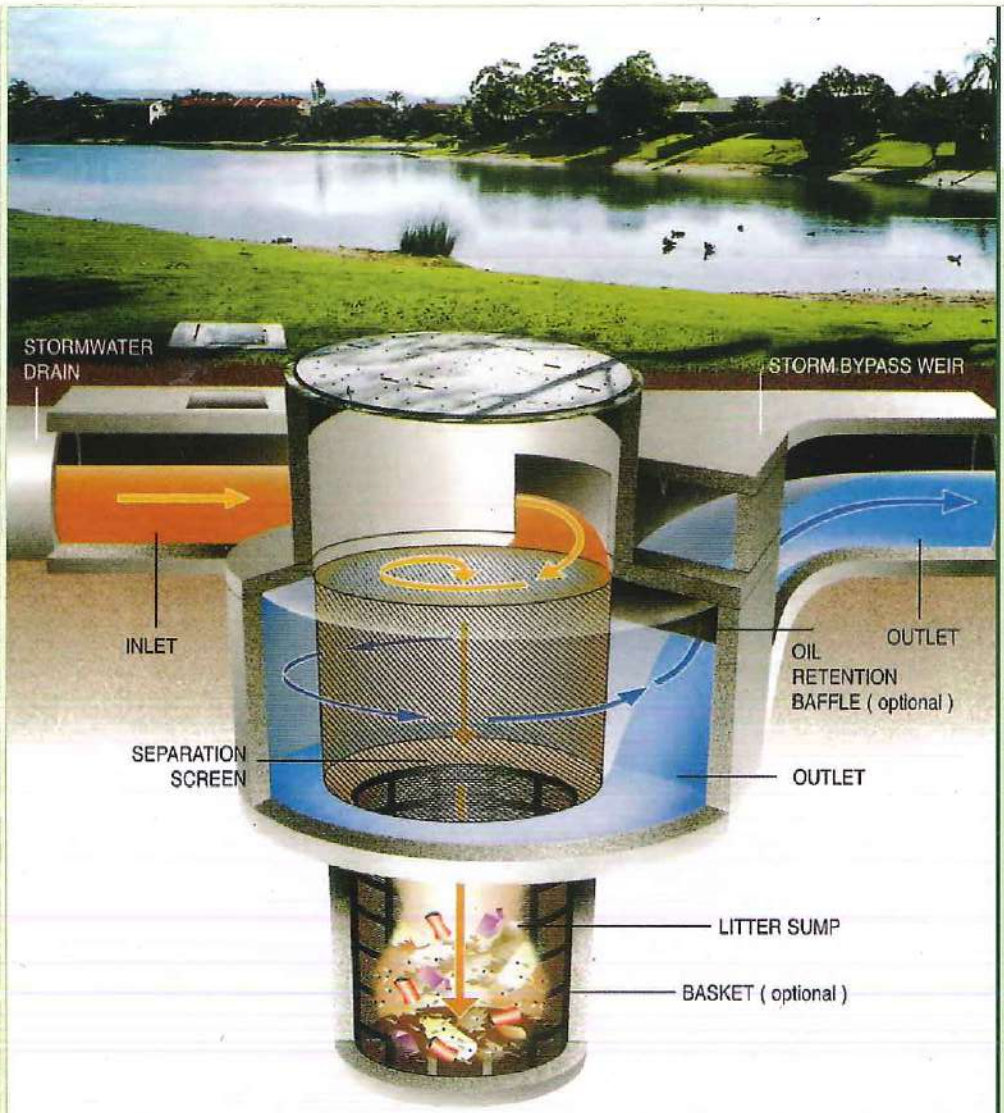
Website: www.ecoclean.com.my

NON-BLINDING SCREENING TECHNOLOGY

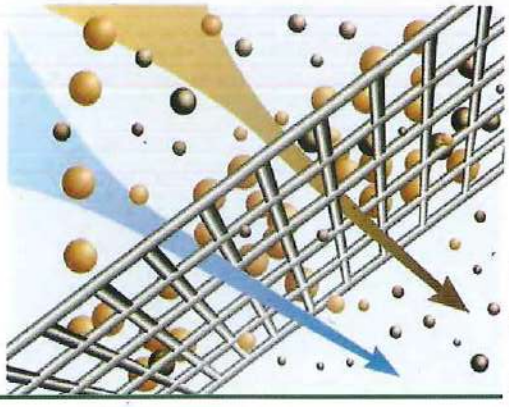
the most effective method of separating solids from liquids

EcoClean Technology

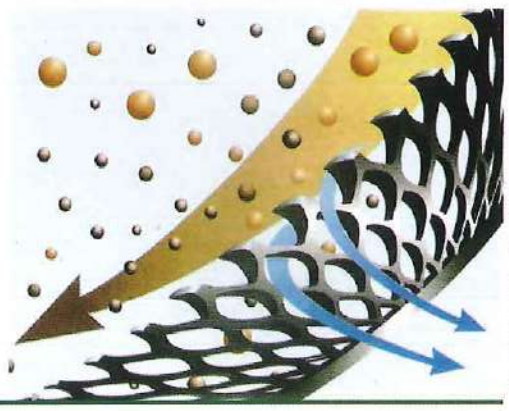
EcoClean Technology Sdn. Bhd. (516716-H)



What is CDS technology?



Conventional direct screening
Flow directed of screen causes blinding



Indirect screening technology
Flow tangential to screen retains solids without blinding

THE CDS TECHNOLOGY OFFERS AN EFFECTIVE METHOD OF SEPARATING SOLIDS FROM LIQUIDS

Based on a surprisingly simple combination of non-blinding screens and flow management, Continuous Deflective Separation (CDS) is a non-powered, low maintenance alternative to traditional screening systems.

The CDS unit is designed to be retrofitted into existing and newly constructed drainage systems. The unit covers a minimum of surface space, with lids specially designed for the location and pre-engineered for traffic loading. Generally located beneath the ground, the unit requires no support infrastructure or power.

CDS technology uses *indirect screening to* trap even small pollutants. A unique, non-blocking screen design deflects particles into a catchment area while clean water flows to the waterway.

Advantages of the CDS technology are:

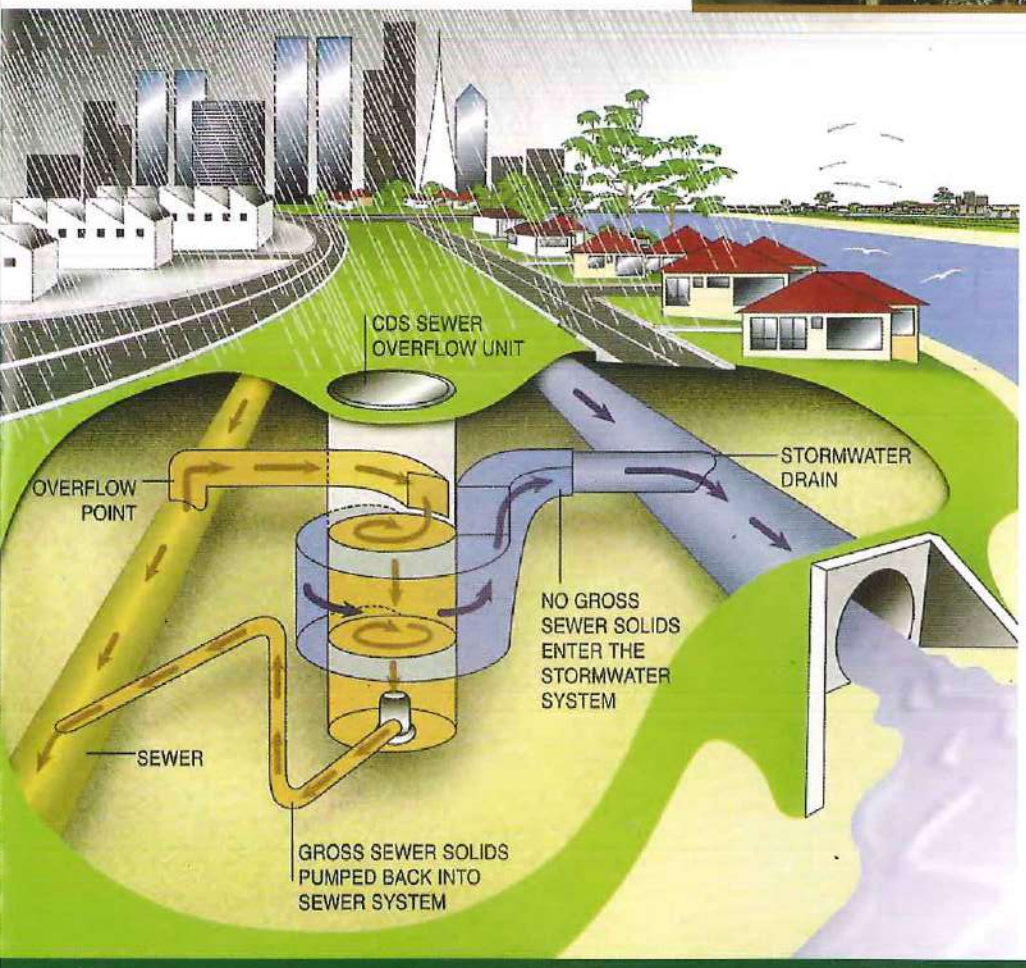
- captures and retains close to 100% of all solid materials, irrespective of flow conditions
- utilises indirect screening, preventing the screen from blinding
- visually unobtrusive
- various unit sizes to suit application and site requirements
- ease of cleaning by means of basket, eduction or utilising a customised cleaning truck.

Applications

A NUMBER OF APPLICATIONS HAVE BEEN DEVELOPED USING THE CDS TECHNOLOGY

Stormwater

CDS has been highly successful in removing pollutants from the stormwater system. Some high profile sites within Australia and overseas have used the technology to keep the waterways clear of litter, vegetation and other matter flowing through the stormwater systems.



SEWER OVERFLOWS
CDS gross solids separator used to screen sewer overflow at relief point. All visible solids removed before discharge.

EcoClean Technology

EcoClean is happy to discuss and design your application.

Rocla Water Quality

CDS TECHNOLOGIES

Industrial

The CDS technology has been of great use to the industrial sector. The indirect screening provides a non-blinding separation system for a number of processes. CDS has been involved in separating pollutants from cooling liquids, sediments from site runoff and washdown facilities.

Fine Solids Separation

CDS Technologies has developed a high rate process for the removal of suspended solids from sewage. It achieves a stream that is highly amendable to disinfection for the treatment of sewer overflows. It is suitable for reuse in many applications, especially ideal for feeding to biological processes with low particle BOD_5 levels.

Sewer Overflows

Sewer overflows have polluted waterways around the world. CDS has developed a product that removes gross solids from sewer overflow locations. The gross solids are separated and returned to the sewege systems and the screened fluid is then diverted into the overflow line.

CDS Unit Selection

The table below provides a general guideline only for sizing a CDS unit. CDS have a team of staff of experienced engineers who can design a system specific to your requirements

CDS Units: KEY CHARACTERISTICS

CDS Model No.	Catchment Area	*Pollution Storage	Underground Footprint	Ground Level Footprint Diameter
	(ha)	(m^3)	(m^2)	(m)
F0303	≤ 0.2	0.10	0.6 x 1.0	0.4
F0404	≤ 0.4	0.20	0.7 x 1.1	0.5
F0506	≤ 1.0	0.50	0.9 x 1.3	0.6
P0708	≤ 2.0	2.77	2.0 x 2.0	1.3
F0908	≤ 4.0	2.65	1.5 x 1.9	1.3
F0912	≤ 6.0	2.95	1.5 x 1.9	1.3
P1009	≤ 8.0	3.35	2.0 x 2.0	1.3
P1012	≤ 12.0	3.60	2.0 x 2.0	1.3
P1015	≤ 18.0	3.80	2.0 x 2.0	1.3
F1512	≤ 20.0	6.90	2.4 x 2.8	2.3
F1518	≤ 25.0	8.10	2.4 x 2.8	2.3
P2018	≤ 45.0	19.00	3.5 x 3.5	2.3
P2028	≤ 75.0	21.50	3.5 x 3.5	2.3
P3018	≤ 100.0	28.50	6.5 x 6.5	3.5
P3030	≤ 200.0	37.00	6.5 x 6.5	3.5
C4527	≤ 200.0-250.0	58.50	8.0 x 8.0	5.0
TWIN C4527	≤ 500.0	Variable	Variable	Variable

NOTE: 1) CDS Model Selection Table shall only be used for initial sizing. Actual CDS model shall be determined by detailed engineering. Please check with EcoClean Technology Sdn Bhd for your specific needs.

2) Twin precast unit combination can be used to treat larger flows - detail on request

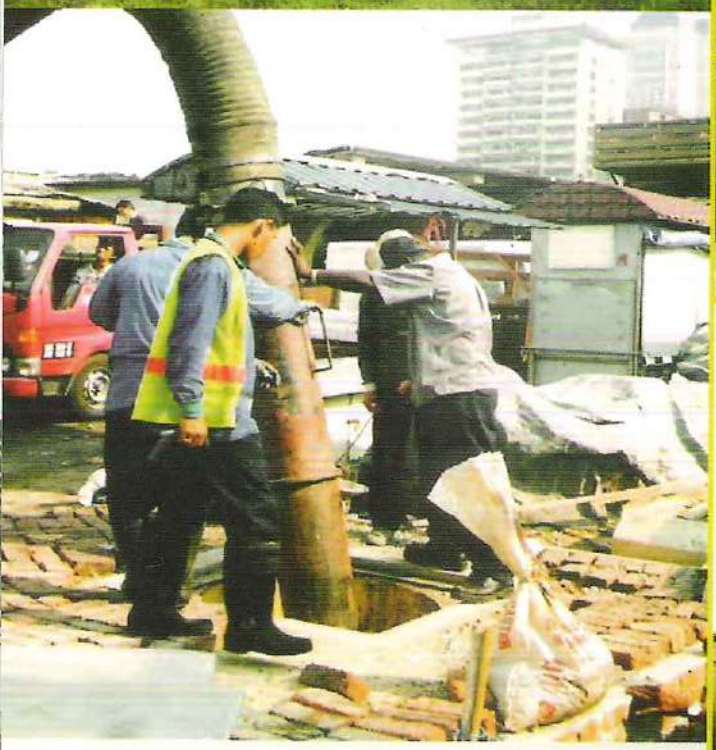
KEY
P - Precast Concrete
F - Fibreglass
C - Cast-in-place
* Based on vacuum suction

P2018 is a **P**recast unit with screen diameter **20**00mm and height **18**00mm

F0912 is a **F**ibreglass unit with screen diameter **9**00mm and height **12**00mm

Other Specific Applications (details on request)

> CDS Surface/Rainwater filtration unit.
> CDS Sewer overflow unit (CSO).
> CDS Stainless steel or FRP industrial separator.
> CDS Sewer mining process for reuse water.
> CDS Smart water (Class A re-use water).
> CDS filternator media filtration system.
> CDS Hybrid Advanced Immobilised Cell Reactor Technology for Stormwater/Wastewater/Sullage Water Treatment Plant.
> CDS Pre Treatment
- for Aquaponics Treatment Plant.
- for Rainwater Harvesting/On Site Detention (OSD) and Bio-Remediation.
- for EcoClean Oil and Grease Trap.



Vacuum Truck

CDS units are safe and effective to maintain. The CDS cleanout crew are fully trained and accredited in confined space entry, machine operation and traffic control. All work is insured and all operations are covered by EcoClean OH&S and Environmental Management Plans.

Removable Basket Unit

Removable Basket Unit

Materials Grab Truck

Three methods of litter removal from the CDS unit. All methods involve a minimum of manual handling.

Waste Management

It is recommended that monitoring of the CDS unit be performed on a monthly basis. Data from this monitoring will provide information on cleaning requirements, establishing a pattern required for your unit.

There are three (3) methods of cleaning: a basket, eduction(suction) and a customised cleaning truck. During the design process, EcoClean will recommend a cleaning regime for the proposed unit.

WORLD'S MOST EFFECTIVE STORMWATER TREATMENT DEVICE & GROSS POLLUTANT TRAP

Worldwide Recognition for Excellence

CDS has been recognised in a number of prestigious Awards:

- *2018 SME Icon Recognization*
- *2017 SME 100 Awards Fast Moving Company*
- *2002 Deloitte Technology Fast 50*
- *2001 Deloitte Technology Fast 50*
- *2000 Emerging Industries*
- *2000 AusIndustry Innovation*
- *1999 Engineering Excellence*
- *1998 Australian Technology*
- *1998 Banksia Environmental*
- *1998 Case Earth*

2018 SME ICONS RECOGNITION

SME 100 Awards 2017 FAST MOVING COMPANIES

DELOITTE TOUCHE TOHMATSU TECHNOLOGY FAST 50

Australian Technology Awards

CASE EARTH AWARDS
A Civil Contractors Federation (CCF) Initiative

Engineering Excellence Awards 1999

BANKSIA ENVIRONMENTAL FOUNDATION INC. 1998 AWARD WINNER

CDS TECHNOLOGIES

Research shows that *CDS* units captures and retain a high percentage of sediments, as well as the full range of gross pollutants such as plastic bags, cigarette butts, vegetation & fast food packaging. The next generation of *CDS* units, now designed with an oil retention baffle, can retain considerable amounts of oil from a spill, giving further protection to the environment. Capturing sediments, spilled oil and gross pollutants makes *CDS* the most complete solution to water pollution, rendering all other trapping solutions obsolete.

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