

# CLEARTEC

The Cost-Effective Solutions  
to Wastewater Treatment

&

**SYSTEMS**



**SCOTT VICKERS**

**Wastewater Treatment Systems**



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# CLEARTEC

## Wastewater Treatment Systems



Typical Influent



Typical Effluent

**CLEARTEC** Wastewater Treatment Systems are specifically designed to remove suspended solids from construction site rainwater runoff and selected industrial wastewater.

The chemical process reduces the suspended solids content below 50mg/litre to enable the treated water to be either discharged into the public drainage system or recycled for further use.

The residual sludge, which is formed by the reaction between the suspended solids and the dosing chemicals is discharged separately and automatically. Each model requires single phase power and is driven by the influent pump.

The influent pump power line for the **SVC10** to **SVC40** models can be connected directly into the Control Panel. The **SVC80** influent pump requires 3-phase power and must be connected to a separate power supply.

The treated water can be reused for vehicular washing bays, recharge of wells, toilets, cube curing, ponding tests etc, thereby significantly reducing water costs.

There are several models available with treatment capacities ranging between 5m<sup>3</sup>/hour and 80m<sup>3</sup>/hour all of which are fully automatic including chemical injection & sludge discharge.

### Advantages

Fully Automatic  
Low Manpower  
Cost Effective

Low Maintenance Cost  
Uses Single Phase Power  
Uses Powder Chemicals

Fully Self-contained  
Easy to Transport  
Few Mechanical Parts



## Standard Fittings



Automatic Sludge Discharge



Automatic Chemical Mixing & Dosing System



Hinged Walkways with Retaining Shackles & Hinged Railings



Security Gates & Hinged Roof



Built-in Influent Pump for SVC30-SVC80

## CLEARTEC SVC*lite* Models

If a more basic model is preferred, then the **SVC*lite*** is available with just a Side Walkway and Railings but without Security Gates but they are still FULLY AUTOMATIC.

All models are constructed in steel and are painted internally with epoxy coating and externally with marine-grade paint, providing an extremely robust and long-lasting surface.

## AUTOMATIC CHEMICAL MIXING SYSTEM

All models incorporate Automatic Chemical Mixing Systems for using powder chemicals, which are more cost effective than liquid supply for simpler logistics and to provide a longer shelf life.





## Standard Key Features



FI



C2

### POWDER CHEMICALS

The system incorporates simple but very efficient automated chemical mixers for both chemicals allowing dosing to be continued even while mixing is carried out. This operation does not require any specially skilled operator. The complete mixing cycle takes less than 15 minutes.

The **FI** Polymer is available in either 1kg bottles or 25kg bags

The **C2** Coagulant is available in 25kg bags

### DESLUDGE VALVES

These are electrically operated and their high torque capacities are designed to handle high viscosity sludge which may include any solids which may have inadvertently been introduced into the system.



### CHEMICAL INJECTION SYSTEM

The chemicals are injected into the influent and pass through static mixers eliminating the need for any moving parts, such as an electric motor in the filtration tank therefore reducing the number of mechanical parts.

## ALL STEEL CONSTRUCTION

All models are completely self-contained and extremely robust. The internal surfaces of the Primary and Secondary Treatment Chambers are coated in epoxy paint internally and marine-grade paint externally. Together, these two features provide a very long service life.

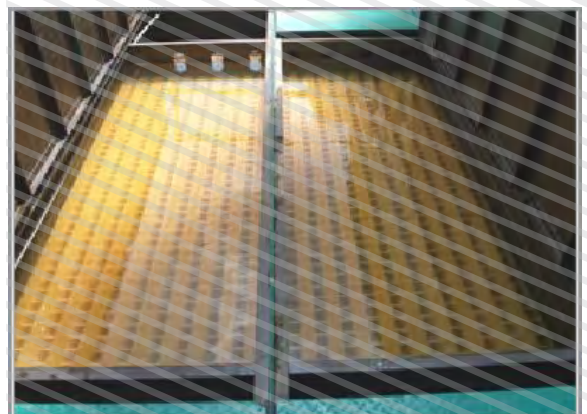


## HINGED WALKWAYS & SAFETY RAILINGS (premium models only)

Provided on all models except the **SVCS** & **SVCIO**. The walkways not only reduce the possibility of mosquito breeding during periods of no rainfall with the walkways covering the stagnant water in the unit but are also essential during maintenance periods, enabling the operator to move around safely on the top. In addition, hinged railings with walkway retaining shackles make relocation from site to site simple.

## LAMELLA BLOCKS

Located in the Secondary Chamber, these are made of Acrylonitrile Butadiene Styrene (ABS), an extremely robust material which gives a very long service life. Compared to the alternative polypropylene, they require very little maintenance other than occasional washing and should last the life of the equipment.





**SECURITY GATES** (*premium* models only)

These are provided on all models except the **SVC5** & **SVCIO** to prevent tampering with the equipment by unauthorised personnel and can be padlocked.

In addition, a hinged roof is also provided for protection from the elements for the operator when recharging the chemical tanks.

**TILTING LADDER** *premium & liteB* models

This is provided with extendable handrails for access to the top of the unit for inspection and maintenance purposes to enhance safety. It can also be folded back for ease of transport.



**SIDE WALKWAY** with short tilting ladder (*lite* models only)

This is provided with slot-in handrails for access to the top of the unit for inspection and maintenance purposes to enhance safety. The complete walkway can also be folded down for ease of transport.



## EFFLUENT SAMPLING POINT (*premium* models only)

Incorporated to enable visual checks to be made on the quality of the water which is being discharged without the need to take any sample from the outlet point which may be some distance from the equipment.

## SINGLE PHASE POWER CONTROL PANELS

Extremely simple layout and method of operation. Each push button lights up for either start or stop functions. The system provides for either fully automatic or manual control of the complete system. If pH adjustment is required, a built-in control relay only requires the connection of an additional dosing pump and sensor.

The mixing, dosing and sludge discharge components are of such low power consumption that 3-phase power is unnecessary which will reduce running cost and simplify installation.



*premium* model



*lite* model





### SPARE POWER SOCKET

A single phase electrical socket is fitted as standard on all premium models on the Control Panel so that a submersible pump (if single phase) can be connected directly to the unit. If not, this socket may be used for any additional single phase item.

### WEATHERPROOF LIGHT (*premium* models only)

Provided on all premium models to facilitate the recharging of chemicals at night or during inclement weather



### INTEGRAL FLOW SENSOR

This is provided to immediately start the chemical dosing pumps as soon as the influent pump in the sedimentation tank commences to inject the influent into the system.

### TSS SENSOR POD This is provided as an alternative to using an IBC





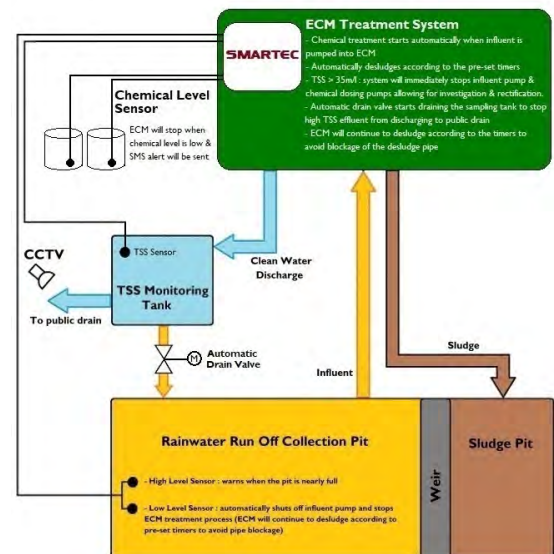
### SOLARTEC SOLAR-POWERED TOTAL SUSPENDED SOLIDS (TSS) & CCTV CONTINUOUS MONITORING SYSTEM

The very compact 250mm x 300mm Solar-Powered Control Panel of this optional extra can be mounted within the Chemical Processing Chamber or be tripod-mounted as a stand-alone system. It enables real-time monitoring to be accessed remotely and can notify by SMS if the TSS limit is exceeded. The system is also protected from unauthorised use if mounted within the Chemical Processing Chamber.



### SMARTEC AUTOMATIC ECM MONITORING & CONTROL SYSTEM

- TSS exceeds maximum
- Pit level critical
- Chemical tanks empty



### WATERTEC SOLAR-POWERED EFFLUENT PARAMETER MONITORING SYSTEM

designed specifically to monitor or adjust the various water parameters



## Optional Features

### FLOWMETER

Where continuous monitoring of flow rate and total flow is required with the option of remote reading



### pH DOSING SYSTEM

Automatically dispenses either an acid or alkali depending on the pH requirement. A pH probe located in the secondary chamber automatically activates the dosing pump as and when required

### HYDROCARBON FILTER

Comprises a special replaceable filter which captures traces of oil and general hydrocarbons which are present in the influent.





# The New **CLEARTEC** *lite-B*

The newly redesigned range of fully automatic **CLEARTEC** *lite-B* ECM models significantly reduces maintenance costs, improves efficiency and safety, while at the same time, treating the rainwater runoff just as efficiently.

## Key Enhancements

- Tilting Ladder complete with Footplate & Sliding Handrails to enable worker to safely stand and clean the internal Chambers without having to climb inside
- Chemical Mixers incorporating automatic timers to ensure long life of mixer motors
- Increased Discharge diameter on all larger models
- Built-in TSS Dosing Pod in Chemical dosing Chamber - saves space
- Completely clear Secondary Chamber - ease of cleaning
- Primary Chamber Sampling Point to check quality of chemically mixed influent
- Full Epoxy coating in both Primary, Secondary Chambers & base of Chemical Dosing Chamber
- Additional 1-year Warranty at no additional cost
- Extended Warranty available after 2 years

Easy-clean  
Secondary  
Chamber



Tilting Ladder with  
Footplate & Sliding  
Hand Rails - No need  
to climb into ECM



Primary  
Chamber  
Sampling Point to  
verify chemical  
mixing quality



Built-in Chemical Dosing  
Chamber complete with TSS  
Sensor Pod - no need for  
separate TSS Measuring Tank



# CLEARTEC SVC5 & SVCIO



**SVC5***lite*



**SVCIO***lite*

The **SVC5 & SVCIO** are compact wastewater treatment systems designed to cater for either relatively small project such as individual housing or linear projects such sewer or road construction.

Both these models have integral mixers, automatically-controlled dosing pumps and desludge valve.

The detachable combined ladder and footplate allows the operator to inspect inside the unit without the need to climb on top and is therefore not provided with hinged walkways or safety railings.

The **SVC5 & SVCIO** are extremely easy to set up or relocate and can be loaded onto a small truck.

## Specifications

DESCRIPTION	SVC5 <i>lite</i>	SVCIO <i>lite</i>	
Electrical Power	1ph 240V 50Hz 15A		
Influent Diameter	mm	50	
Effluent Diameter	mm	75	
Max Discharge	m <sup>3</sup> /hr	5	10
Dimensions	m	1.1 x 1.0 x 1.9	1.4 x 1.2 x 2.1
Weight	kg	500	650

Note: Dimensions do not include removable ladder



# CLEARTEC SVC20

The **SVC20** is a compact wastewater treatment system designed to cater for either small developments or for linear projects such as sewer or road construction.

This model has automatically-controlled mixers, dosing pumps and desludge valve.

The detachable tilting ladder allows safe access to the top where hinged walkways are fitted as standard for ease of inspection inside the unit. Hinged railings are also provided.

The **SVC20** is extremely easy to set up or relocate and can be loaded onto a small truck fitted with a crane.

## Specifications

DESCRIPTION		SVC20
Electrical Power		1ph 240V 50Hz 15A
Influent Diameter	mm	75
Effluent Diameter	mm	75
Max Discharge	m <sup>3</sup> /hr	20
Dimensions	m	2.0 x 1.8 x 2.5
Weight	kg	1,100 <sup>premium</sup> 1,000 <sup>lite</sup>

Note: Dimensions do not include removable ladder or railings when vertical



SVC20<sup>premium</sup>



SVC20<sup>lite</sup>

# CLEARTEC SVC30 & SVC40

The **SVC30** & **SVC40** are wastewater treatment systems designed to cater for small to medium size sites such as small to medium building projects.

These models have automatically-controlled mixers, dosing pumps and two desludge valves.

The detachable tilting ladder allows safe access to the top where hinged walkways are fitted as standard for ease of inspection inside the unit and hinged railings are also provided (*premium* only). The *lite* model has a side walkway with railings & tilting ladder. Both are easy to set up or relocate and can be loaded onto a lorry crane

## Specifications

DESCRIPTION	SVC30	SVC40
Electrical Power	1 ph 240V 50Hz 15A	
Influent Diameter	mm	75
Effluent Diameter	mm	100
Max Discharge	m <sup>3</sup> /hr	30
Dimensions	m	3.0 x 1.8 x 2.4
Weight	kg	2,000 <i>premium</i> 1,800 <i>lite</i>

Note: Dimensions do not include removable ladder



SVC40*lite*



SVC30*premium*



# CLEARTEC SVC60 & SVC80

The **SVC60** & **SVC80** are wastewater treatment systems designed to cater for civil engineering sites or large building projects. These models have automatically-controlled mixers, dosing pumps and two desludge valves. The detachable tilting ladder allows access to the top where hinged walkways are fitted as standard on the *premium* model for ease of inspection inside the unit together with hinged railings. The *lite* model has a side walkway with railings & tilting ladder. Both models are easy to set up or relocate and can be loaded onto a lorry crane.

## Specifications

DESCRIPTION	SVC60	SVC80	
Electrical Power	1 ph 240V 50Hz 15A		
Influent Diameter	mm	75	
Effluent Diameter	mm	150	
Max Discharge	m <sup>3</sup> /hr	60	80
Dimensions	m	5.0 x 2.3 x 2.5	6.0 x 2.3 x 2.5
Weight	kg	3,200 <i>premium</i> 2,500 <i>lite</i>	3,500 <i>premium</i> 3,000 <i>lite</i>

Note: Dimensions do not include removable ladder



**SVC80lite**  
with side walkway

**SVC60premium**



# CLEARTEC<sup>eco</sup>

The **CLEARTEC<sup>eco</sup>** is a very efficient lamella clarifier designed for use where chemical dosing to ensure strict compliance with regulations on effluent quality is not required. It effectively removes most suspended solids from the influent when passing through lamella plate blocks.

This is achieved as the lamella blocks have an extremely large effective settlement area, allowing the whole process to be contained within a small footprint, removing the need for settlement ponds. This is ideal for sites with limited space.



The influent is pumped into the equipment from the site collection pond and rises up through the lamella blocks where the solids slide off the inclined surfaces and settle as a sludge in the base of the unit. The clean water rises to the top and is discharged. Hand-operated desludge valves can be opened as required to discharge the sludge. **CLEARTEC<sup>eco</sup>** is available in three sizes up to 60m<sup>3</sup>/hr and is supplied complete with hinged walkways, fold-down railings and tilting access ladder to enhance safety.

## Specifications

DESCRIPTION		SVC30 <sup>eco</sup>	SVC40 <sup>eco</sup>	SVC60 <sup>eco</sup>
Influent Diameter mm		75	100	100
Effluent Diameter mm		100	150	150
Max Discharge	m <sup>3</sup> /hr	30	40	60
Dimensions	m	3.0 x 1.8 x 2.5	4.0 x 1.8 x 2.5	5.0 x 2.3 x 2.5
Weight	kg	1,500	1,800	2,500

Note: Dimensions do not include removable ladder or railings when vertical



# CLEARTEC<sub>plus</sub>

## Fully Automatic Wastewater & Sludge Treatment System

**CLEARTEC<sub>plus</sub>** is designed to treat rainwater runoff and also remove sufficient water from the residual sludge to enable a sludge cake to be handled as a solid. This model has automatic chemical mixers, dual polymer dosing pumps, a coagulant dosing pump, desludge valves, a screwpress and cleaning system to enable the excess water to be continuously removed.

Periodically, the resultant sludge from the chemical process is discharged into a collection chamber at the base of the unit. It is then passed through a static mixer in which a flocculent is injected to re-floc the mixture before passing through the screwpress.

A sufficiently high percentage of the water content is extruded, producing a cake, which can then be used either as backfill on the site or disposed of in a conventional dump truck. Simultaneously, the extruded water is returned into the **CLEARTEC** to remove any suspended solids.



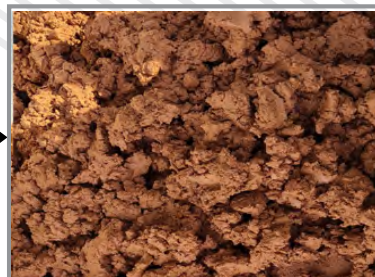
**SVC60<sub>plus</sub>**



### CLEAN WATER & SLUDGE CAKE - CONTINUOUSLY



Liquid Sludge



Sludge Cake

# CLEARTEC<sup>plus</sup>

When the sludge has been emptied from the collection chamber, the screwpress continues to operate for a set period of time to ensure the complete removal of any residual sludge. At predetermined times the outer surface of the screwpress rotating plates are sprayed with water for cleaning



Chemical Dosing Chamber



Control Panel for automatic operation of:-

### CLEARTEC

- ❖ Chemical Mixers
- ❖ Chemical Pumps
- ❖ Desludge Valves

### SLUDGTEC

- ❖ Sludge Transfer Pump
- ❖ Water Transfer Pump
- ❖ Sludge Conversion

### OPTIONAL

### SOLARTEC

- ❖ TSS Reading Panel

### OPTIONAL

### SMARTTEC

- ❖ ECM Control System



FI Dosing Pumps & Mixer



Sludge Conversion Chamber



# CLEARTEC<sup>plus</sup>



Liquid Sludge Collection Chamber with Auto Desludge Valves & Overflow

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Storage Compartment for easy access of chemicals



Water Transfer Pump Exuded water is transferred back into the system for suspended solids removal



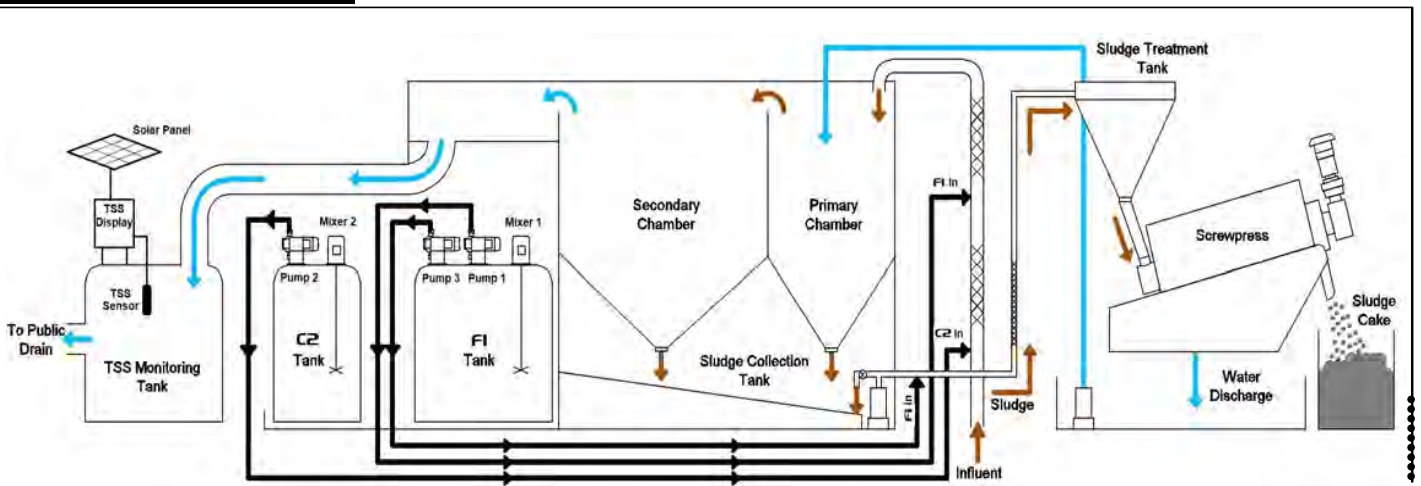
Sludge Inlet Control System Enables the sludge flow rate to be adjusted to suit the required flocculation



Sludge Cake Discharge Internal / External

# CLEARTEC<sup>plus</sup>

## Flow Diagram



## Specifications

DESCRIPTION	SVC60 <sup>plus</sup>	SVC80 <sup>plus</sup>
Water Treatment Capacity m <sup>3</sup> /hr	up to 60	up to 80
Electrical Power	I <sub>ph</sub> 240VAC 50Hz 15A	
Primary Influent Diameter mm	75	
Effluent Diameter mm	150	
Liquid Sludge Flow Rate m <sup>3</sup> /hr	0.75 - 1.25	
Sludge Influent Diameter mm	50	
Cake Discharge Rate kg/hr	60 - 100	
Dimensions m	5.2 x 2.3 x 2.5	6.2 x 2.3 x 2.5
Weight kg	4,500	5,000

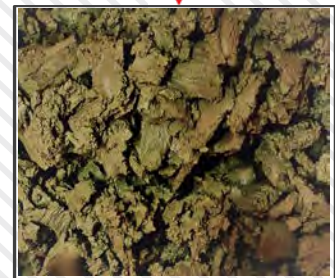


# SLUDGTEC

## SLUDGE CONTINUOUS DEWATERING SYSTEM



Liquid Sludge



Sludge Cake

The **SLUDGTEC** is a treatment system which converts construction liquid sludge into a solid cake by removing a high percentage of water continuously rather than as a batch process. The cake can then be used as backfill or removed from site in a conventional dump truck. The extruded water can then be treated by a **CLEARTEC** or other ECM to remove any remaining suspended solids.



## Specifications

DESCRIPTION	SLUDGTEC	
Electrical Power	1ph 240V 50Hz 15A	
Influent Diameter	mm	25
Liquid Sludge Max Flow	m <sup>3</sup> /hr	1.0
Sludge Cake Discharge	kg/hr	60-100
Effluent Diameter	mm	75
Dimenions	m	2.0 x 1.8 x 1.9
Weight	kg	800

# SLUDGTEC

A special flocculent is injected into the liquid sludge as it is being transferred from the sludge pit into the flocculation tank and then fed into the screw press.

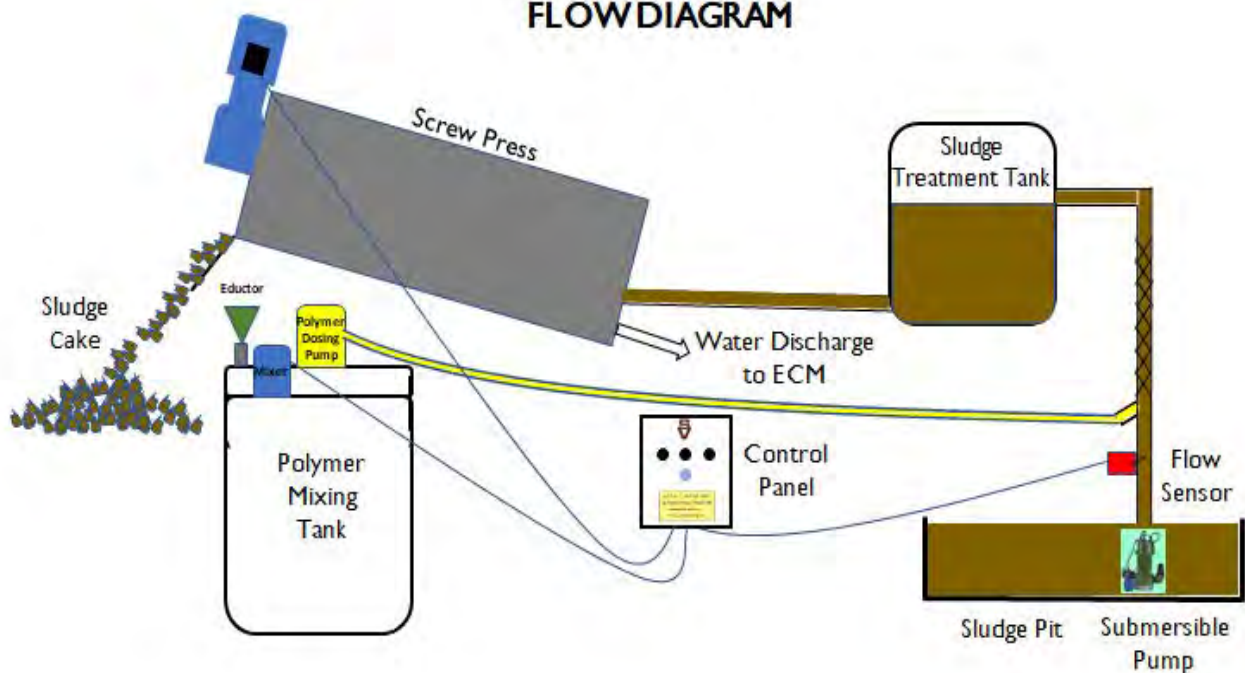
The water is squeezed out through the screw press moving plates and the sludge cake is slowly and continuously extruded.

The screwpress plates are automatically washed at predetermined times during the extrusion process without having to stop the machine.

The whole process is automatic and the system will still continue to produce sludge cake for a set period of time even after the submersible pump has stopped to ensure that all sludge cake has been removed from the screwpress plates.



## FLOW DIAGRAM





# SOLARTEC

## SOLAR-POWERED CONTINUOUS MONITORING TSS & CCTV SYSTEM

Available for all ECM Systems

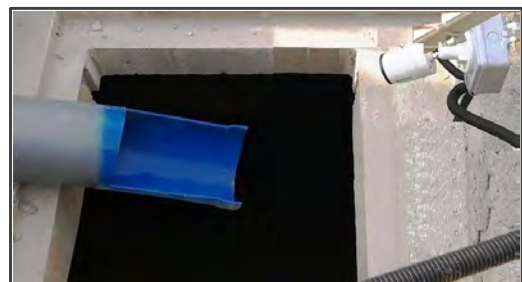
- ❖ Small, lightweight & portable
- ❖ Built-in or stand-alone
- ❖ Low power consumption
- ❖ Customised SMS alerts
- ❖ Smart Artificial Intelligence (AI)
- ❖ Generator not required
- ❖ Cyber secure network
- ❖ Web based access



Solar Panel above IP65 Steel Control Panel with built-in battery pack



CCTV System complete with LED light



Typical CCTV Installation adjacent to public drain

**TSS MONITORING & SAMPLING TANK**  
with in-built Inlet & Outlet

TSS Sensor installed in Cap (Plug & Play)



**TSS SENSOR POD**  
An alternative to the IBC TANK



# SOLARTEC

## Specifications

### DESCRIPTION

#### Solar Power Unit

Multi-Crystalline Solar Panel 100W

Battery Pack 45AH

MPPT (Maximum Power Point Tracking) Charger

Load Balancing Controller

#### CCTV Camera

2MP Full-HD 1080P IP67 Bullet Type IR Camera

1 No. High Intensity LED day-light Light

#### TSS Sensor

0-400mg/litre (Total Suspended Solids Range)

#### Enclosure

300mm x 250mm x 150mm IP65 Steel Enclosure with hinged door

#### System

TSS/CCTV Controller with OLED Display.

3G/4G Broadband Device

SD card image backup

VPN Secured

#### Website

User login details

15-day downloadable archived image

30-day downloadable data

SMS - 3 numbers included. Additional numbers up to a max 10 at extra cost



Typical TSS  
Monitoring Installation  
with Solar Panel on top



Typical CCTV Installation  
with Solar Panel on top

# SMARTEC

## AUTOMATIC ECM CONTROL SYSTEM

**SMARTEC** Automatic Control System to control the operation of the ECM system and will activate a siren with flashing light and send an SMS alert if:-

- ❖ TSS exceeds maximum permitted reading the ECM will stop, automatically drain the Sampling Tank and go on standby
- ❖ Collection Pit influent level reaches critical height, the ECM will continue operating but stop and go on standby when the Pit is empty
- ❖ Chemical Tank levels are monitored for full - **GREEN** Light, low - **AMBER** Light and empty **RED** Light, when the ECM will stop and go on standby

### Components

- ❖ Control Panel
- ❖ Level Sensors
- ❖ Influent Pump Controller
- ❖ Siren & 3-colour Flashing Light



### OPTION

#### **AUTOSTART** Solar-powered GenSetSystem

Complimentary to **SMARTEC** or as a stand-alone. It will automatically stop the GenSet when the water in the collection pit is too low for a **CLEARTEC** or other brand ECM to function and will automatically restart when the water level rises sufficiently.

### Components

- ❖ Control Panel
- ❖ Collection Pit Level Sensor for Auto Mode
- ❖ SMS Modem Controller for SMS Remote Mode
- ❖ Manual By-Pass Switch for Manual Mode
- ❖ Solar Powered & Back-up Battery



**SMARTEC** REDUCES MANPOWER - INCREASES PRODUCTIVITY

# SMARTEC

## Specifications

### SMARTEC

Control Panel with Analyser

Chemical Drum Level Sensors

Influent Collection Pit Level Sensor

Submersible Pump Contactor  
Power Disconnection

Automatic Drain Valve

#### Alert

Siren - Audible & -Visual Tri-coloured  
Flashing Light

SMS - 3 numbers included. Additional  
numbers up to a max 10 at extra cost

### AUTOSTART

#### Solar Power Unit

Mono Crystalline Panel

SLA Battery Pack

Solar Charge Controller

#### Enclosure

Steel 300mm x 300mm x 200mm IP65

Mounting Bracket GI-Pole

### SYSTEM

SMS Modem Controller - Remote Mode

Manual By-Pass Switch - Manual Mode

Float Switch - Auto Mode

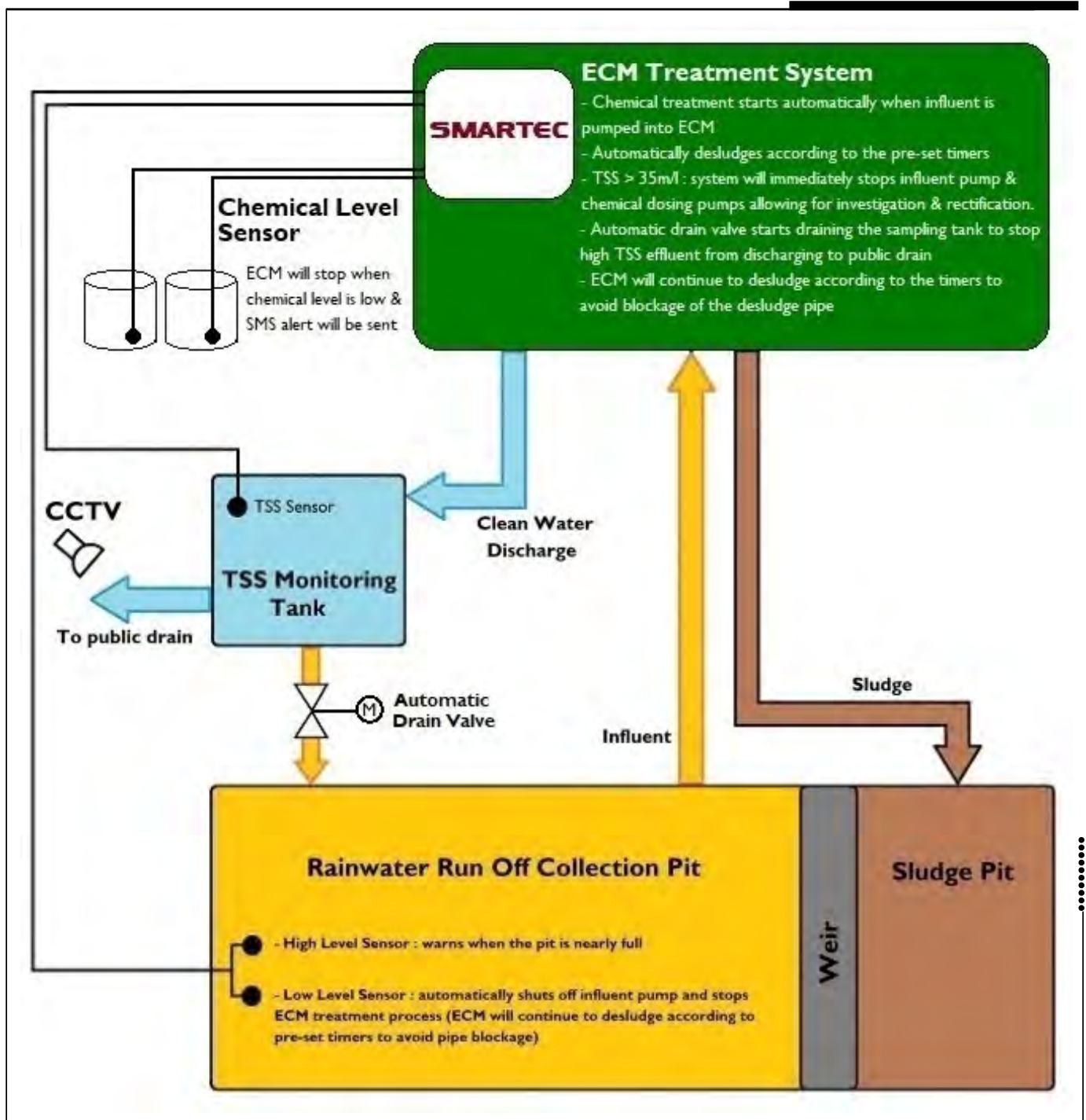
## 7 PARAMETERS

Remote Controls	SMS Command	✓
Monitoring & Alert	Sedimentation Pond	✓
	Chemical Level	✓
	Treated Water Quality	✓
Automatic Intervention	Stop/Divert silty water	✓
	Stop treatment plant	✓
Site Warning	Siren/Flashing Light	✓

# SMARTEC

## Schematic Layout

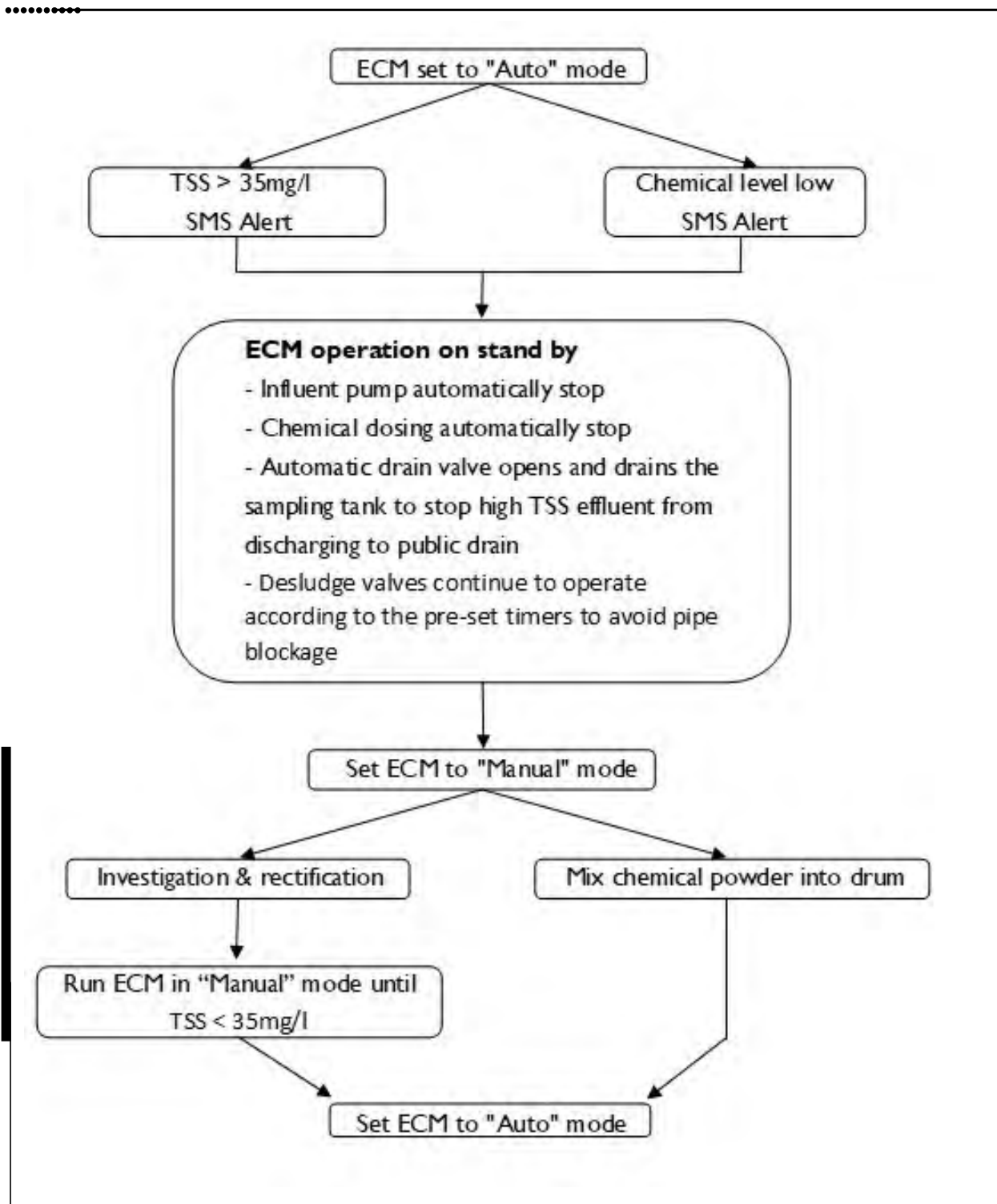
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# SMARTEC

## Flow Chart

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# SMARTEC<sup>lite</sup>

**SMARTEC** Automatic System to monitor and control the operation of the ECM system and will activate a siren with red flashing light and send an SMS alert if the TSS exceeds the maximum permitted reading. The ECM will stop, go on standby and effluent will drain back to the pit.



## Components

- ❖ Control Panel
- ❖ TSS Sensor
- ❖ Stop Valve Cover (non-**CLEARTEC**)
- ❖ Influent Pump Controller
- ❖ Siren & Red Flashing Light

## Description

### System

Control Panel with Analyser  
TSS Sensor 0-400mg/litre - stainless steel

### Alert

Siren & Red Flashing Light - Audible & Visual  
SMS - 3 numbers. Additional numbers up to a maximum 10 at extra cost



## OPTIONAL

CCTV System complete with LED light



# COLOURTEC

## SOLAR POWERED SILTY WATER DETECTION SYSTEM

Solar-Powered Silty Water Detection System using image analysis captured by CCTV which automatically closes the effluent outlet, stops the ECM and discharges the silty water back into the collection pit

Available for **CLEARTEC** ECM Systems & other brands

- ❖ Immediate STOP of silty water
- ❖ Small, lightweight & portable
- ❖ Built-in or stand-alone
- ❖ Low power consumption
- ❖ Generator not required
- ❖ Cyber secure network



CCTV System complete with LED light and blue marker in Discharge Pipe



Solar Panel above IP65 Steel Control Panel with built-in battery pack



Automatic Discharge Control

# COLOURTEC

## Specifications

### Solar Power Unit

Mono-Crystalline Solar Panel

Battery Pack

Charge Controller

### CCTV Camera

2MP Full-HD 1080P IP67 Bullet Type IR Camera

High Intensity LED daylight Light

### Enclosure

300mm x 300mm x 200mm IP65 Steel Enclosure with hinged door

### System

CCTV Controller

4G Broadband Device

Solenoid activation

VPN Secured

SMS Alerts (maximum 3 contact numbers)





# WATERTEC

## EFFLUENT PARAMETER CONTINUOUS MONITORING SYSTEM

The **WATERTEC** System is designed specifically to monitor or adjust the following effluent parameters:-

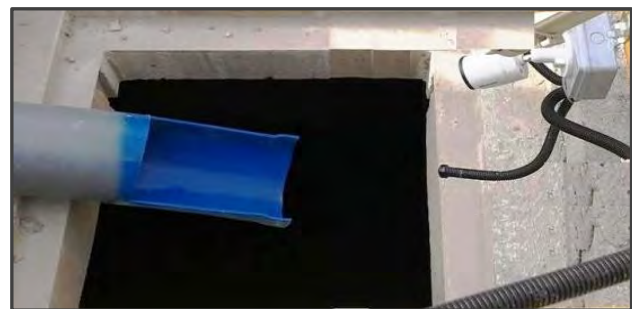
- ❖ Total Suspended Solids (TSS)
  - ❖ Total Dissolved Solids (TDS)
  - ❖ Electrical Conductivity (EC)
  - ❖ Turbidity
  - ❖ pH
- Also available for:-
- ❖ Biological Oxygen Demand (BOD)
  - ❖ Chemical Oxygen Demand (COD)



Monitoring Probes in Collection Tank



Solar Panel



Typical CCTV complete with 2 No. LED lights installed adjacent to public drain

# WATERTEC

## Specifications

### DESCRIPTION

#### Solar Power Unit

50W Monocrystalline Solar Panel

30AH Lithium-Ion Battery Pack

MPPT (Maximum Power Point Tracking) Charge

Load Balancing Controller

#### CCTV Camera

2MP Full-HD 1080P IP67 Bullet Type IR Camera

2 No. High Intensity LED day-light Lights

#### Sensors

TSS: 0-400 mg/litre (Total Suspended Solids Range)

pH: 0-14

Conductivity: 0-44,000 uS/cm

Turbidity: 0-400 NTU

#### Enclosure

300mm x 250mm x 150mm IP65 Steel Enclosure with hinged door

#### System

TSS/CCTV Controller with OLED Display.

4G LTE Wi-Fi Router 300MBps (2 No. Antenna)

SD card image backup

VPN Secured

#### Website

User login details

14-day downloadable archived image

30-day downloadable data

SMS - 3 numbers included. Additional numbers up to a max 10 at extra cost



Control Panel for Mixer & Dosing System



Typical CCTV Installation with Solar Panel on top



# CLEARTEC

## Fully Automatic Model Specifications at a Glance

DESCRIPTION	SVC5 <sup>lite</sup>	SVC10 <sup>lite</sup>	SVC20 <sup>premium</sup>	SVC30 <sup>premium</sup>	SVC40 <sup>premium</sup>	SVC60 <sup>premium</sup>	SVC80 <sup>premium</sup>	
<b>CHEMICAL PROCESSING CHAMBER</b>								
Dosing Pumps	2 No.							
Chemical Tank	2 No. 80 litres		2 No. 200 litres			2 No. 500 litres		
Chemical Mixers	2 No.							
Level Sensor	1 No. in each chemical tank except lite models							
Flocculent Dispenser	1 No.							
Chemicals	Flocculent F1 in powder form							
	Coagulant C2 in powder form							
<b>AUTOMATIC DESLUDGING SYSTEM</b>								
Desludge Valves	1 No. Electric			2 No. Electric				
<b>pH SYSTEM (OPTIONAL)</b>								
Dosing Pump	-		1 No. c/w pH Controller					
Chemical Tank	-		1 No. 80 litres			1 No. 200 litres		
<b>CONTROL SYSTEM</b>								
Control Panel	Weatherproof to IP54 Steel Cabinet with manual/automatic control of:-							
	Chemical Dosing Pumps							
	Chemical Mixers							
	Integral Flow Sensor							
	Chemical Tank Level Sensors - <i>premium</i> only							
	Desludge Valves complete with Timer System							
	pH Dosing Pump & Probe (if fitted)							
<b>GENERAL</b>								
Influent Diameter	mm	50	75	75				
Effluent Diameter	mm	75		75			100	
Discharge	m <sup>3</sup> /hr	5	10	20	30	40	60	80
Dimensions (L x W x H)	m	1.1 x 1.0 x 1.9	1.4 x 1.2 x 2.2	2.0 x 1.8 x 2.5	3.0 x 1.8 x 2.5	4.0 x 1.8 x 2.5	5.0 x 2.3 x 2.5	6.0 x 2.3 x 2.5
Weight	kg	500	650	1,100	2,000	2,200	3,000	3,500

Note:  
 Dimensions do not include removable ladder or railings when vertical  
 Weights refer to all *premium* models unless specified otherwise

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