

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 **SVC30** 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 5m³/hour and 80m³/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 (premium models only)



Security Gates & Hinged Roof (premium models only)

CLEARTEC SVClite Models

If a more basic model is preferred, then the **SVClite** is available with 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.



Standard Key Features

AUTOMATIC ONBOARD CHEMICAL MIXING SYSTEM

All models incorporate an Automatic Chemical Mixing System located in the Chemical Dosing Chamber specifically for using powder chemicals, which are more cost effective than liquid supply for simpler logistics and to provide a longer shelf life.



FI

C2

POWDER CHEMICALS

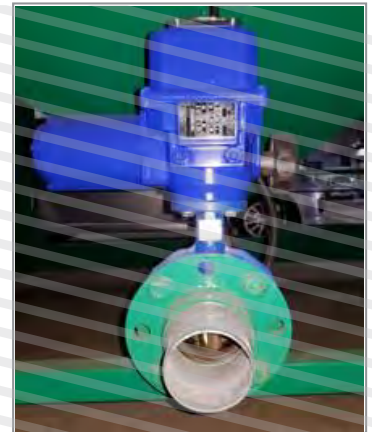
The system incorporates simple but very efficient automatic chemical mixers for both chemicals allowing dosing to be continued even while mixing is carried out. This operation does not require any specially skilled operator. The complete mixing cycle takes less than 10 minutes.

FI Polymer available in 1kg bottles or 25kg bags

C2 Coagulant 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.



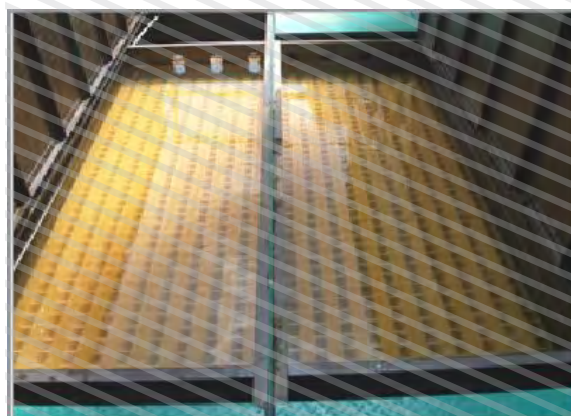
HINGED WALKWAYS & SAFETY RAILINGS (*premium* models only)

Provided on all models except the **SVC5** & **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 PLATE BLOCKS - OPTIONAL

To be located in the Secondary Chamber to increase the floc settling velocity and reduce the overall chemical consumption.

These are made of Acrylonitrile Butadiene Styrene (ABS), an extremely robust plastic, which gives a very long service life. Compared to the alternative polypropylene, they require very little maintenance other than occasional washing and could 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 locked.

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

TILTING LADDER *premium* models only

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.



SAMPLING POINT

Incorporated in the inlet pipe to enable visual checks to be made on the effectiveness of the chemicals being injected into the influent.

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

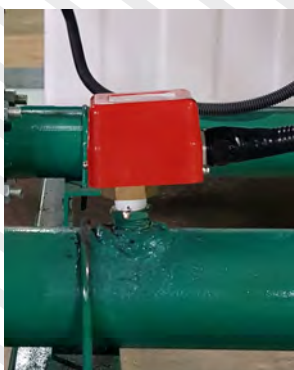


SPARE POWER SOCKET

A single phase electric socket is fitted as standard on all 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 starts the chemical dosing pumps immediately the submersible pump in the sedimentation tank injects the influent.



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

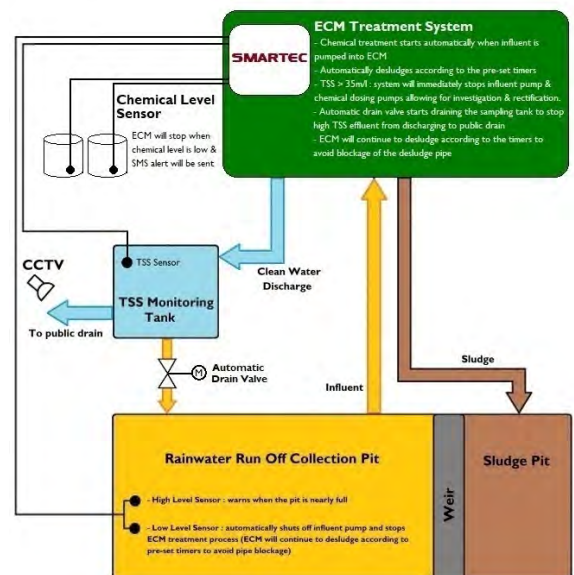
The very compact 250mm x 300mm Solar-Powered Control Panel of this optional extra can be mounted within the Chemical Processing Chamber or be tripod-mounted as a stand-alone system. It enables real-time monitoring to be accessed remotely and can notify by SMS if the TSS limit is exceeded. The system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



WATERTEC SOLAR-POWERED EFFLUENT PARAMETER MONITORING SYSTEM

Designed specifically to monitor and adjust various water parameters



Optional Features

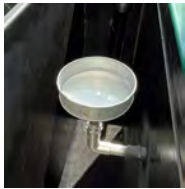


pH DOSING SYSTEM

Automatically dispenses either an acid or alkali depending on the pH requirement. The pH sensor is located in the secondary chamber and automatically activates the dosing pump as and when the pH reading is either above or below the permitted range.

TSS SENSOR POD

This is offered as an alternative to the conventional IBC tank for the location of the TSS Sensor



HYDROCARBON SKIMMER

This is located in the inlet section of a **CLEARTEC** and will remove trace elements of any floating hydrocarbons. It is automatically actuated by a timer connected to a valve which opens and closes at preset intervals for discharge into a collection tank directly below the discharge pipe

HYDROCARBON FILTER

Comprises a special replaceable filter cloth which captures any trace hydrocarbons which may still be present in the effluent



FLOWMETER

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



CLEARTEC^{lite}

The newly redesigned range of fully automatic **CLEARTEC^{lite}** ECM models significantly reduces maintenance costs, improves efficiency and safety, while at the same time, treats the rainwater runoff just as efficiently to remove suspended solids below 50mg/litre.

Key Enhancements

- Side Walkway with Railings and Tilting Ladder 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
- Optional Lamella Blocks Set for faster TSS settlement and possible chemical reduction
- 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 small additional cost
- Optional built-in TSS Sensor Pod in Chemical dosing Chamber - reduces overall footprint
- Extended Warranty available after 2 years

Easy-clean
Secondary
Chamber



Side Walkway with
Railings & short
tilting ladder -
No need to climb
onto ECM



Chemical Dosing Chamber complete
with Optional TSS Sensor Pod
- no need for separate TSS IBC
Measuring Tank



CLEARTEC SVC5 & SVCIO



SVC5lite



SVCIOlite

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

Both models have on-board integral mixers, automatically-controlled dosing pumps and a 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 could be loaded onto a small truck.

Specifications

DESCRIPTION		SVC5lite	SVCIOlite
Electrical Power		1ph 240V 50Hz 15A	
Influent Diameter	mm	50	
Effluent Diameter	mm	75	
Max Discharge	m ³ /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 a 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 ³ /hr	20
Dimensions	m	2.0 x 1.8 x 2.5
Weight	kg	1,100 ^{premium} 1,000 ^{lite}

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



SVC20^{premium}



SVC20^{lite}

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** models have 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 ³ /hr	30	40
Dimensions	m	3.0 x 1.8 x 2.4	4.0 x 1.8 x 2.4
Weight	kg	2,000 <i>premium</i> 1,800 <i>lite</i>	2,200 <i>premium</i> 2,000 <i>lite</i>

Note: Dimensions do not include removable ladder



SVC30*premium*



SVC40*lite*



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** models for ease of inspection inside the unit together with hinged railings. The **lite** models have 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	I ph 240V 50Hz 15A	
Influent Diameter	mm	75
Effluent Diameter	mm	150
Max Discharge	m ³ /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 premium 2,500 lite 3,500 premium 3,000 lite

Note: Dimensions do not include removable ladder



SVC80lite with side walkway



SVC60premium



CLEARTEC^{eco}

The **CLEARTEC^{eco}** 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 injected 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^{eco}** is available in three sizes from 30m³/hr to 60m³/hr and is supplied complete with hinged walkways, hinged railings and a tilting access ladder with sliding handrails to enhance safety.

Specifications

DESCRIPTION		SVC30 ^{eco}	SVC40 ^{eco}	SVC60 ^{eco}
Influent Diameter mm		75	100	100
Effluent Diameter mm		100	150	150
Max Discharge m ³ /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_{plus}

Fully Automatic Wastewater & Sludge Treatment System

CLEARTEC_{plus} 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.



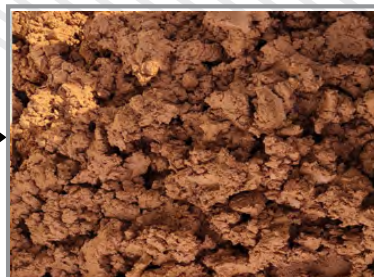
SVC60_{plus}



CLEAN WATER & SLUDGE CAKE - CONTINUOUSLY



Liquid Sludge



Sludge Cake

CLEARTEC_{plus}

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

SMARTEC

- ❖ ECM Control System



FI Dosing Pumps & Mixer



Sludge Conversion Chamber



CLEARTEC^{plus}



Liquid Sludge Collection Chamber with Auto Desludge Valves & Overflow

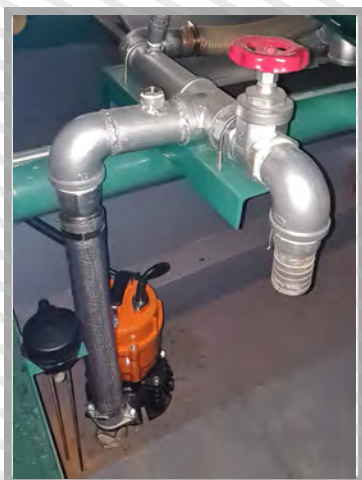
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Storage Compartment
for easy access of chemicals



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



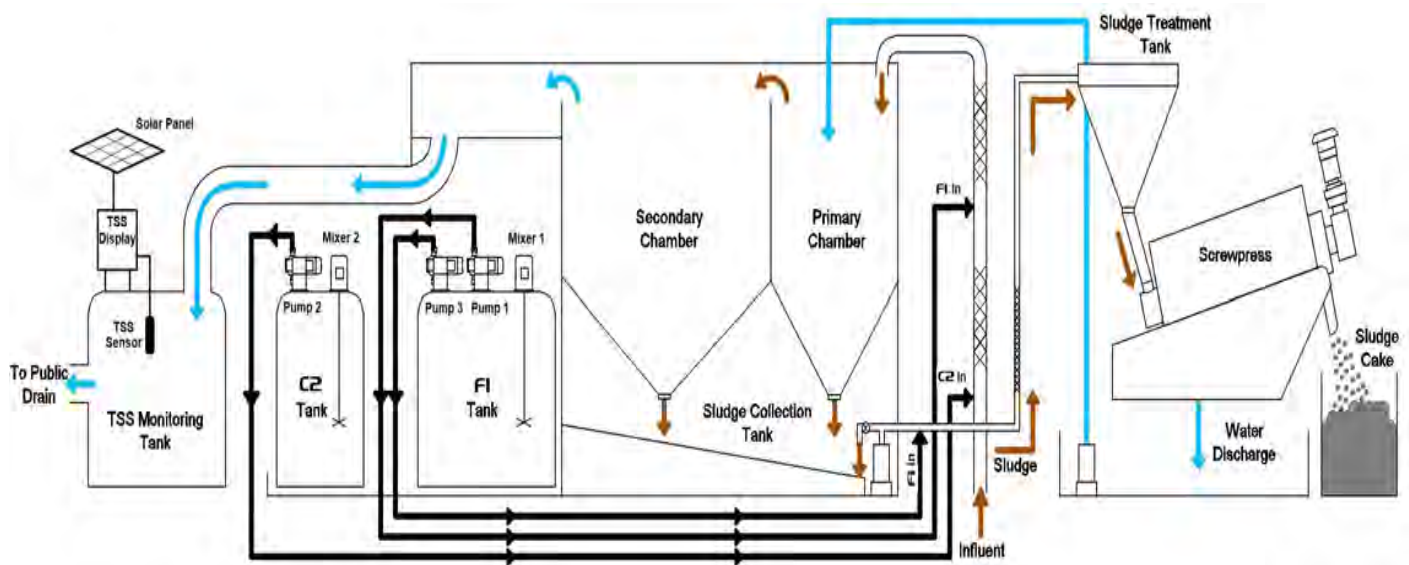
Sludge Inlet Control System
Enables the sludge flow rate
to be adjusted to suit the
required flocculation



Sludge Cake Discharge
Internal / External

CLEARTEC^{plus}

Flow Diagram



Specifications

DESCRIPTION		SVC60 ^{plus}	SVC80 ^{plus}
Water Treatment Capacity	m ³ /hr	up to 60	up to 80
Electrical Power		Iph 240VAC 50Hz 15A	
Primary Influent Diameter	mm	75	
Effluent Diameter	mm	150	
Liquid Sludge Flow Rate	m ³ /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



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		1 ph 240V 50Hz 15A
Influent Diameter	mm	25
Liquid Sludge Max Flow	m ³ /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.

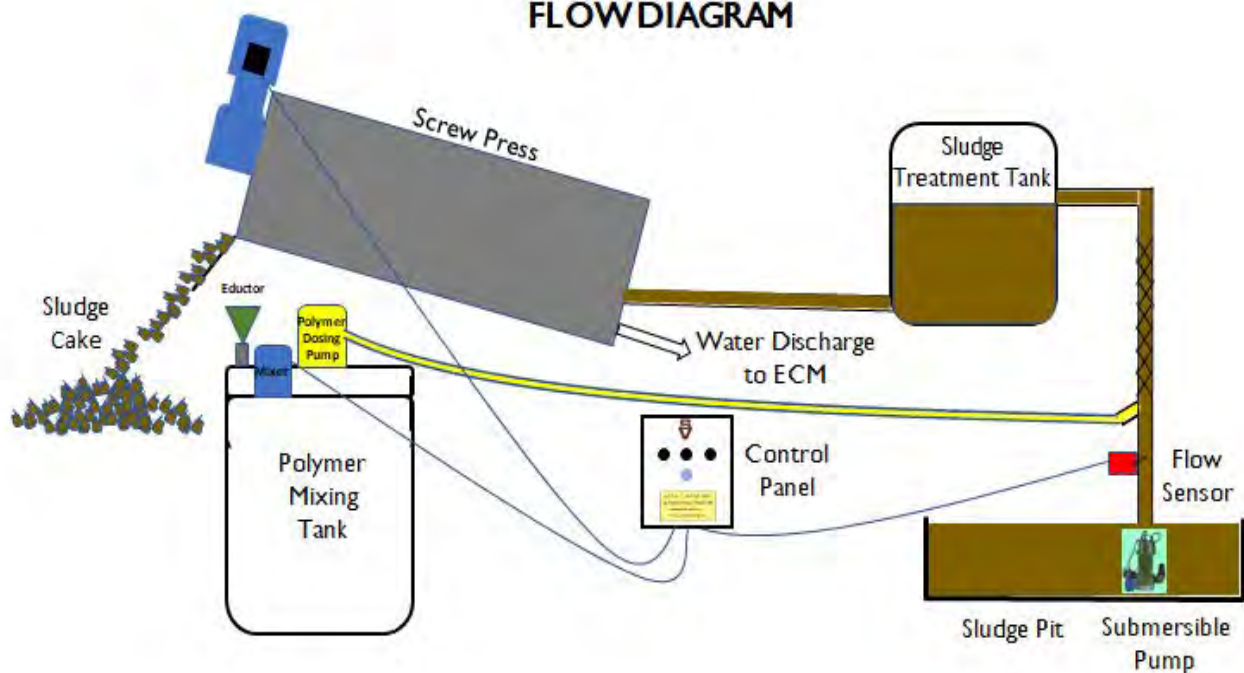
The water is squeezed out through the screw press moving plates and the sludge cake is slowly and continuously extruded.

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 &
MEASURING TANK**
with in-built Inlet
& Outlet

TSS Sensor
installed in Cap
(Plug & Play)



TSS SENSOR POD
An alternative to
the IBC Measuring
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

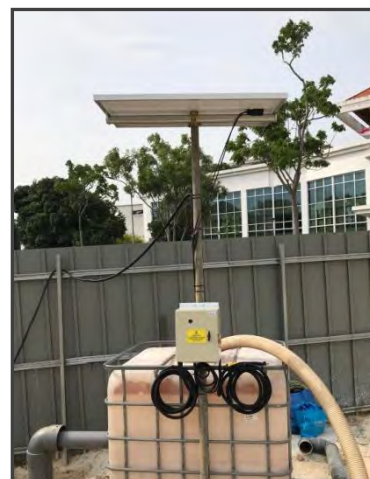
Website

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 & AUTOSTART

AUTOMATIC ECM CONTROL SYSTEMS

SMARTEC Automatic ECM Control System

Monitors and controls the operation 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 & go on standby

Components

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

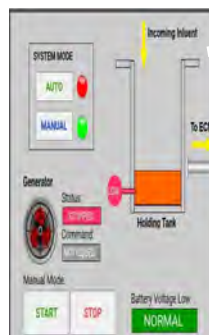


AUTOSTART Solar-Powered GenSet System

Complimentary to **SMARTEC** or as a stand-alone. Unlike **SMARTEC** which utilises SMS, **AUTOSTART** is controlled by an App on a smartphone and will automatically stop a dedicated ECM 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
- ❖ Processing Unit
- ❖ GenSet On/Off Module
- ❖ Mobile Apps & Programming
- ❖ Solar Powered with Back-up Battery
- ❖ 4G Network (SIM Card not included)
- ❖ Collection Pit Level Sensor for Auto Mode



SMARTEC & AUTOSTART REDUCE MANPOWER - INCREASE 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 max of 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

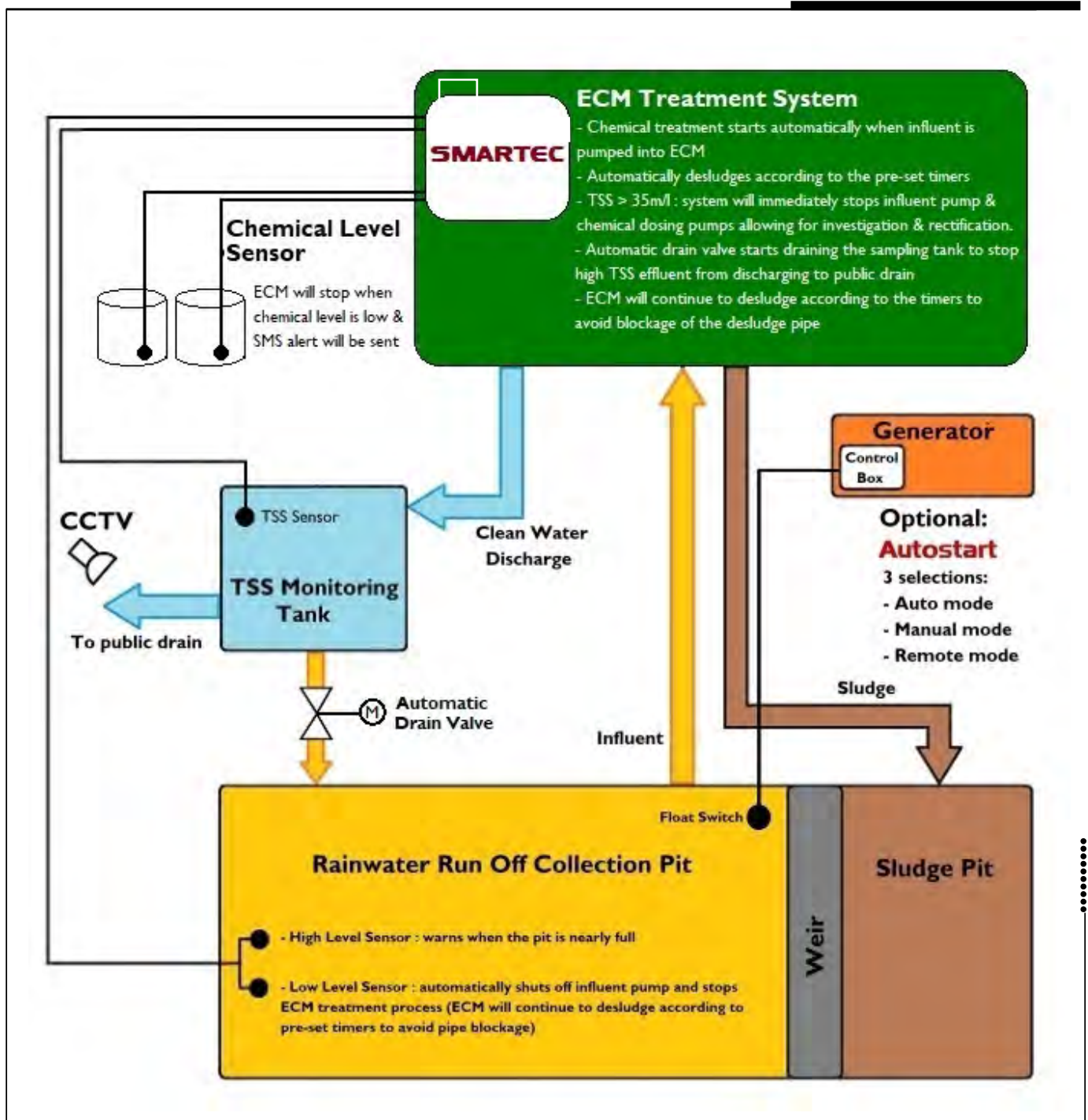
Float Switch - Auto Mode

8 PARAMETERS

Power Supply (if required)*	AUTOSTART Generator	✓
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	✓

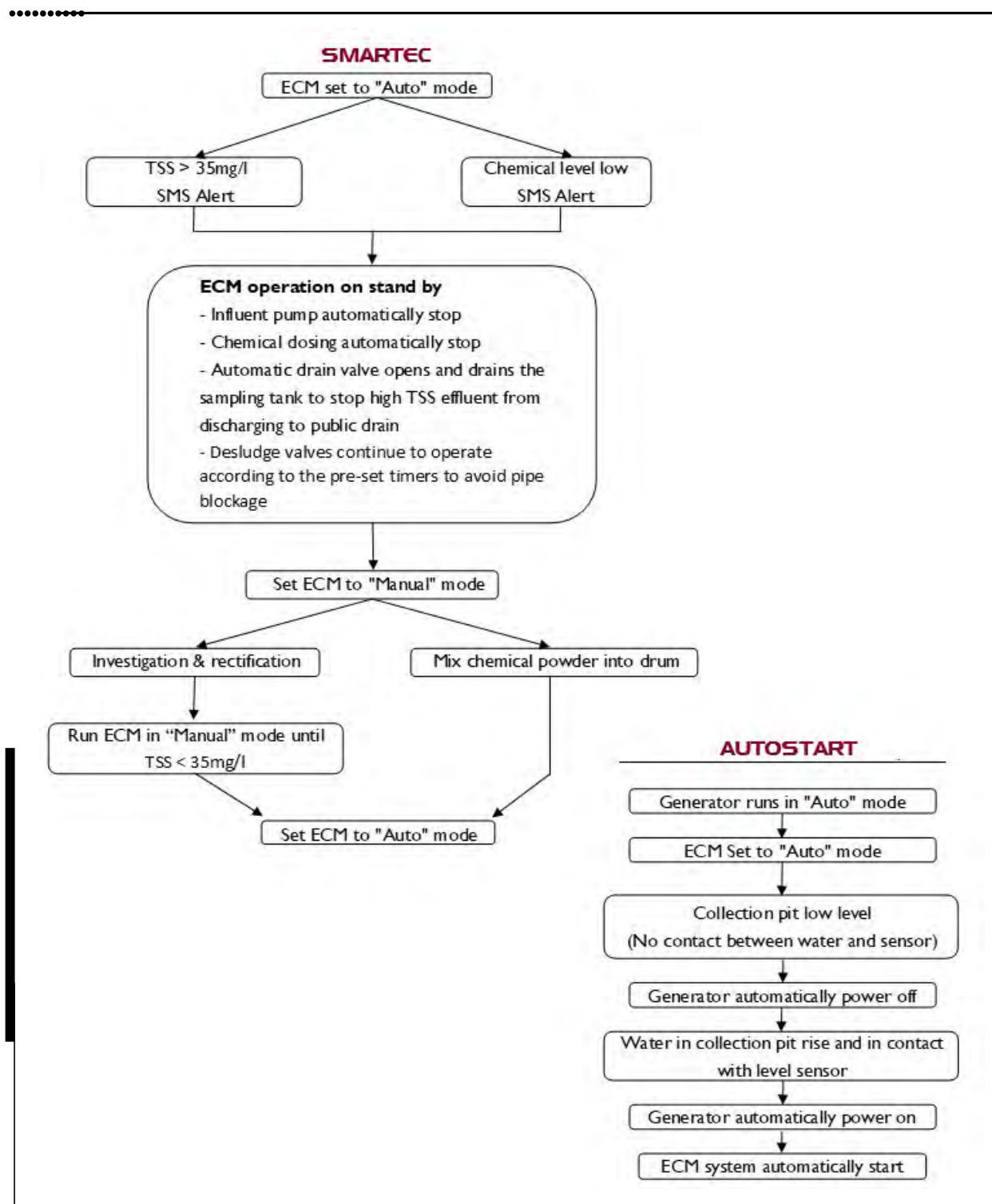
SMARTEC

Schematic Layout



SMARTEC

Flow Chart



SMARTEC^{lite}

SMARTEC^{lite} is a simpler Automatic System which only monitors and controls 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 the 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 included. Additional numbers up to a maximum of 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 3 numbers. Additional numbers up to a
maximum 10 at extra cost

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:-

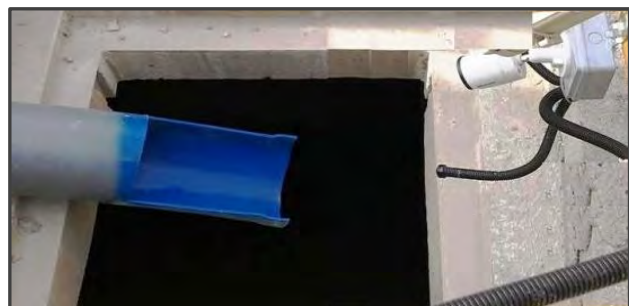
- ❖ Biological Oxygen Demand (BOD)
- ❖ Chemical Oxygen Demand (COD)



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 ^{lite}	SVC10 ^{lite}	SVC20 ^{premium}	SVC30 ^{premium}	SVC40 ^{premium}	SVC60 ^{premium}	SVC80 ^{premium}
		CHEMICAL PROCESSING CHAMBER						
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						
		AUTOMATIC DESLUDGING SYSTEM						
Desludge Valves		1 No. Electric			2 No. Electric			
		pH SYSTEM (OPTIONAL)						
Dosing Pump		-		1 No. c/w pH Controller				
Chemical Tank		-		1 No. 80 litres			1 No. 200 litres	
		CONTROL SYSTEM						
Control Panel		Weatherproof to IP54 Steel Cabinet with manual/automatic control of:-						
		Chemical Dosing Pumps						
		Chemical Mixers						
		Integral Flow Sensor						
		Chemical Tank Level Sensors (premium models only)						
		Desludge Valves complete with Timer System						
		pH Dosing Pump & Sensor (if fitted)						
		GENERAL						
Influent Diameter	mm	50	75	75				
Effluent Diameter	mm	75		100			150	
Maximum Discharge	m³/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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