

Conder[®] ASP

ACTIVATED SLUDGE PROCESS



Sewage treatment plant for residential and commercial projects

The Conder ASP Package Sewage Treatment Plant is the perfect solution for residential and commercial projects where mains drainage is unavailable. The plant will serve a population range from 6-25 and is fast becoming the industry's system of choice for reliability, ease and low installation costs.

Installed to treat wastewater with minimal impact on the environment, typical applications include single dwellings, small communities or developments, refurbishments and rural barn conversions.

Conder[®]
ASP

Superior Technical Performance

The highly successful Conder ASP is designed and tested in accordance with BS EN12566-3:2005 and the British Water Code of Practice for Flows and Loads as well as being CE marked. The standard range plants produce an effluent quality of better than 20mg/L BOD; 30 mg/L SS; 20 mg/L NH₃.

Conder[®] HDPE ASP

SEWAGE TREATMENT PLANT

The perfect solution for residential and commercial projects where mains drainage is unavailable.

Conder ASP Sewage Treatment Plant in High-Density Polyethylene (HDPE) material. The plant showcases all the main features of the highly successful Conder ASP GRP Sewage Treatment Plant plus additional features and benefits, such as a pumped version for when gravitational flow is not available.

What's New?

- HDPE material - durable, recyclable and impact resistant
- Integrated blower as standard for a more compact design
- Optional telescopic extension for a more manageable finish to ground level
- Reduced installation costs due to new compact design
- Sturdy, structured design for ease of transportation and storage
- Detachable legs for preferred method of installation
- Pre-moulded lifting eyes for improved on-site handling

Existing Features and Benefits

- Fully CE marked, designed and tested in accordance with BS EN 12566-3:2005
- Standard effluent quality 20mg/L BOD; 30mg/L SS; 20mg/L NH₃
- Serving a population range of 6 -25
- Option of external blower
- Complete below ground installation
- Low running costs
- Quality, adaptable design
- Lockable pedestrian access cover



How it Works

The Conder HDPE ASP Sewage Treatment Plant comprises of a single tank and within this tank there is an inner central bio-zone chamber and an outer settlement zone. Sewage enters and leaves the treatment plant through the following process:

Step 1

The plant accepts and treats the incoming sewage in the central bio-zone chamber, with use of the extended aeration principle.

Step 2

A simple coarse diffuser, housed in a draft tube, introduces the air from the integrated blower that provides the oxygen to the bacteria, which then treats the sewage.

Step 3

The Bio-zone then retains the mixture of sewage and bacteria until the level of treatment has been achieved.

Step 4

The treated final effluent then enters the settlement zone where settlement takes place. The settled solids are drawn back towards the draft tube, housing the diffuser and are returned via the airlift principle to the bio-zone for further treatment.

Step 5

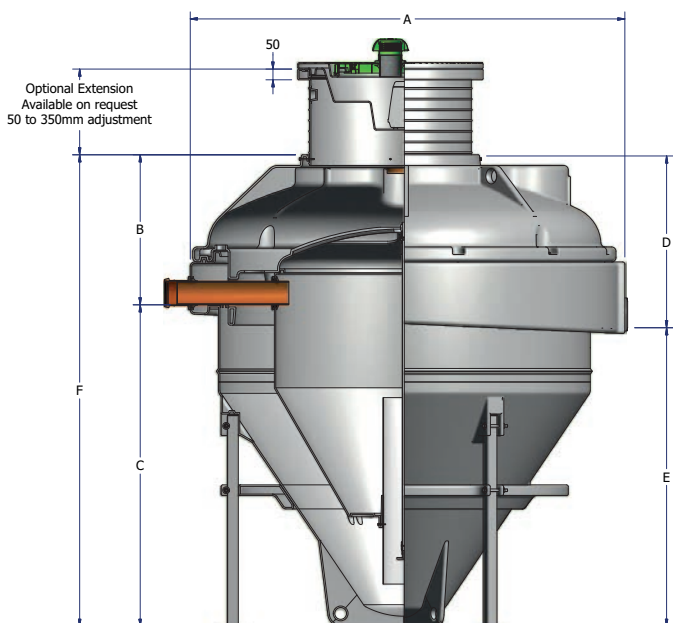
The treated (final) effluent subsequently leaves the plant over a weir, at the outlet level, that extends around the circumference of the tank. The movement of the fluid through the whole system is by gravity displacement. The option for an integral final effluent pumped discharge is available.

Specifications

The table below can be used as a specification in choosing the correct Conder HDPE ASP for your project.

All applications should be specified to comply with the British Water Code of Practice for Flows and Loads. Further advice and assistance is available from our experienced internal and external sales teams. Site visits and assessments are recommended to ensure the correct equipment is proposed prior to installation.

Conder Unit		Conder HDPE ASP Range of Sewage Treatment Plants					
		ASP 06 HDPE	ASP 08 HDPE	ASP 12 HDPE	ASP 16 HDPE	ASP 20 HDPE	ASP25 HDPE
Population Equivalent		6	8	12	16	20	25
Hydraulic Load (l/day)		1200	1600	2400	3200	4000	5000
Organic Load (g BOD5/day)		360	480	720	960	1200	1500
Ammonia (g NH3/day)		48	64	96	128	160	200
O/A Diameter	A	2000	2000	2000	2000	2000	2000
Standard Inlet Invert (mm)	B	700	700	700	700	700	700
Inlet Invert to Base (mm)	C	1500	1500	1900	1900	2000	2300
Standard Outlet invert (mm)	D	800	800	800	800	800	800
Outlet Invert to Base -Gravity Discharge (mm)	E	1400	1400	1800	1800	1900	2200
O/A Depth inc. lid (mm)	F	2250	2250	2650	2650	2750	3050
Pipework Fitting (mm)		110	110	110	110	110	110
Blower Rated Power (Watts)		80	90	90	160	160	230
Estimated Blower Consumed Power @ Working Pressure (Watts)		75	80	90	130	130	190
Blower Cover Size (Green) (mm)		Ø450	Ø450	Ø450	Ø450	Ø450	Ø450
Plant cover (Grey) (mm)		Ø750	Ø750	Ø750	Ø750	Ø750	Ø750
Plant Weight (kg)		250	250	280	280	300	350



Installation

The Conder HDPE ASP Sewage Treatment Plant requires a relatively low cost and easy installation process, typically using only a 200mm deep concrete base followed by a pea shingle or self-compacting backfill.

Premier Tech Aqua work closely with a nationwide network of installation partners and detailed installation guidelines are provided for each product.

All electrical work should be carried out in accordance with current regulations (for example NIC EIC/Building Regulations).

Peripherals available

Extension Kit

Deeper inverts can be accommodated by means of either: a telescopic extension, offering 50-350mm adjustment, or a larger 800mm extension that can be cut to suit on site. Taking away the worry of installing at the incorrect levels.

Package Pump Station

Package pump stations are available in single and dual pump arrangements with varying inverts. The pump stations are designed to suit specific site requirements, these can be retrofitted where required.

Servicing

Through a nationwide network of British Water accredited service engineers. Premier Tech Aqua offer a comprehensive range of services including commissioning and on-going service contracts.

Extended Warranty

All Premier Tech Aqua products come with an automatic 12 month warranty. Our market leading 5 year warranty can be obtained for free by visiting our website and completing a short warranty activation form, or the form supplied with the plant.

For any queries regarding this or any other products in the Premier Tech Aqua range please contact a member of our sales team on the below details who will be more than happy to help.