Conder ASP range

conder
ENVIRONMENTAL SOLUTIONS

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the Conder **ASP range** of package sewage treatment plants

Clereflo™ ASP 6-25

demand special treatment

Designed and tested in accordance with BSEN12566-3:2005 and with the The British Water Code of Practice for Flows and Loads, the Clereflo ASP will serve a population range from 6-25 persons and is suitable for residential and commercial projects where mains drainage is not available. Typical applications include single dwellings, small communities or developments, refurbishments and septic tank conversions.

For homeowners and self-builders the key features of the new Clereflo ASP are its discreet below ground installation, its quiet odourless operation and the low ongoing maintenance and running costs. For builders and developers, as well as being price competitive, the Clereflo ASP's compact design offers a low-cost, easy installation process.

features and benefits

- Independently Tested to BSEN12566-3:2005
- Value for money
- Completely below-ground installation
- Easy to install – reduced costs
- Proven technology with reliable performance
- Quiet, odourless operation
- Compact design with no moving parts
- Typically 1 to 3-year desludging period
- Deeper inverts available with a standard extension
- Option for pumped influent or effluent
- Minimum standard to be achieved 20mg/l BOD; 30mg/l SS; 20mg/l NH4-N. The Clereflo ASP range achieves 8mg/l BOD; 12mg/l SS; 7.7mg/l NH4-N as per our EN cert

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 for each application.

Standard range plants produce an effluent quality better than 20mg/l BOD; 30mg/l SS; 20mg/l NH4-N. The correct plant should be selected to meet the requirements of the discharge consent / licence or exemption granted by the Environment Agency, SEPA or NI EA.

PRODUCT REFERENCE (pe)	MAX FLOW PER DAY (M^3)	MAX LOAD PER DAY	
		BOD g	NH4-N g
ASP06	1.08	360	48
ASP08	1.44	480	64
ASP12	2.16	720	96
ASP16	2.89	960	128
ASP20	3.6	1200	160
ASP25	4.5	1500	200

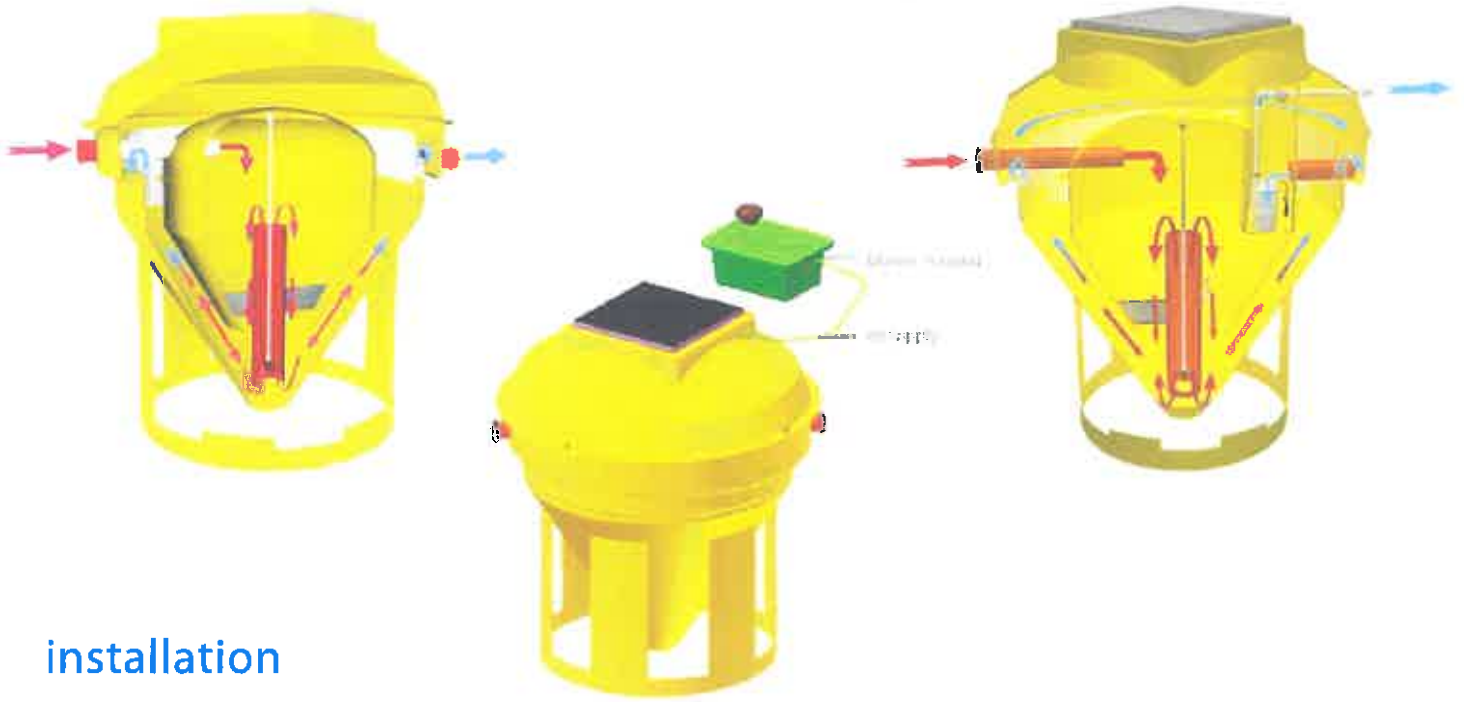
TREATMENT EFFICIENCIES AS TESTED FOR EN12566-3

Efficiency	Effluent	mg/l
BOD	97.1%	8
NH4-N	74.6%	7.7
SS	96.7%	12
Total Nitrogen	49.2%	26
Total Phosphorus	57.3%	3.3

process and plant description

The Clereflo ASP treatment plant comprises a single tank. Within the tank there is an inner central bio-zone chamber and an outer settlement zone. The plant accepts and treats the incoming sewage, using the extended aeration principle, in the central bio-zone chamber. A simple coarse bubble diffuser, housed in a draft tube, introduces the air that provides the oxygen to the bacteria, which then treats the sewage. The bio-zone retains the mixture of sewage and bacteria until the level of treatment has been achieved.

The treated effluent then enters the settlement zone where settlement takes place. The settled solids are drawn back towards the draft tube, with the diffuser in it, and are returned via the airlift principle to the bio-zone for further treatment. 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 fluid through the whole system will be by gravity displacement or if using our pumped system, this will be displaced via the integrated pump chamber to the point of discharge.



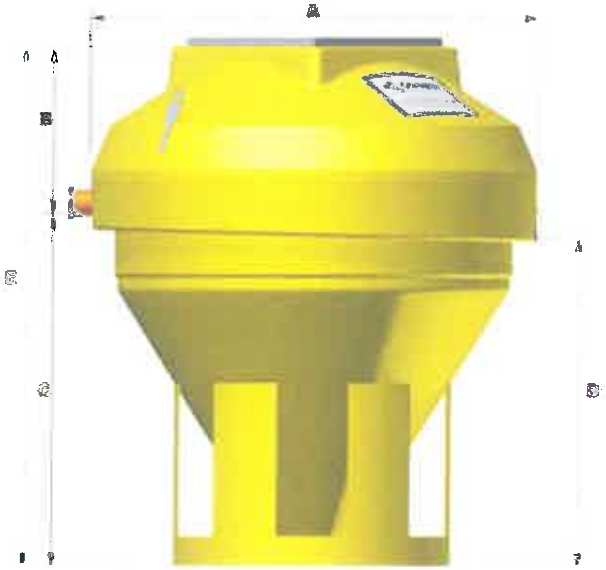
installation

Conder Products advises the use of a suitably experienced and qualified installation company to install any of its products. For suggested installers in your area, please contact our sales team on 08702 640004.

Care should be taken to fully assess the site ground conditions prior to commencement of installation. The ASP range requires a relatively low cost installation, typically using only a 200mm deep packed base followed by pea shingle or self compacting backfill.

Detailed installation guidelines are provided for each product. All electrical work should be carried out in accordance with current regulations. (For example NICEIC building Regulations).

specification



Population Equivalent		5	8	12	16	20	25
Hydraulic Load (l/day)		1080	1440	2160	2890	3600	4500
Organic Load (g BOD5/per day)		360	480	720	960	1200	1500
NH4-N (g per day)		48	64	96	128	160	200
O/A Diameter (mm)	A	2000	2000	2000	2000	2000	2000
Standard Inlet Invert (mm)	B*	750	750	750	750	750	750
Inlet Invert to Base (mm)	C	1500	1590	1800	1900	2000	2300
Outlet Invert to Base (mm)	D	1400	1400	1700	1800	1900	2200
O/A Depth (mm)	E*	2250	2250	2550	2650	2750	3050
Pipework Fitting (mm)		110	110	110	110	110	110
Max Rated Power (Watts)		135	135	225	225	300	375
Estimated Power Consumption at working pressure (Watts)		75	80	130	130	130	190
Cover Size (mm Ø)		750x750SQ	750x750SQ	750x750SQ	750x750SQ	750x750SQ	750x750SQ
Plant Weight (kg)		230	230	260	300	360	440

*Deeper inverts can be accomodated with extension shafts.

OPTIONAL EXTRAS

Extension kit

Deeper inverts can be accommodated by means of an access extension kit which is available in 1.0m length. These are designed to be cut to suit on site and can also be retrofitted, again on site, taking away the worries of installing at incorrect levels.

Package Pump Stations

Inlet sewage and final effluent pump chambers are available in single or dual units, at varying inverts designed to suit the customer's on site requirements. Again these can be retrofitted if problems occur during installation.

Sample Chamber

A Sample Chamber is required in order for the regulatory authority to take representative samples of the final effluent for testing.

SERVICE

Package sewage treatment plants are installed to treat wastewater and to protect the environment. They must be cared for and maintained so that they can continue to operate effectively. Failure to do this will undoubtedly lead to pollution of the water environment, which is an offence and may result in prosecution.

For the Clereflo ASP, Conder Products recommend that a maintenance agreement is taken out to service the plant as indicated in the Environment Agency Guideline PPG4. A plant de-sludge should be carried out between 1 and 3 years (depending on the plant loading)

Through a nationwide network of British Water accredited service engineers and agents, Conder Partners offer a comprehensive range of services including commissioning and ongoing service contracts.

about conder environmental solutions

Protecting the water environment has been the mission of Conder Environmental Solutions, since it was established in the early 1970s. The business is organised into specialist divisions: Conder Products, Conder Technical Solutions, Conder Pumping Solutions. Our full capability extends beyond our successful range of 'sealed-design' commodity products, to providing expert consultancy and design for hi-specification bespoke packages across all areas of wastewater pollution control. Conder works closely with engineers, architects, specifiers, developers and self-builders. Providing support from detailed site surveys, plant selection, full technical proposals and liaison with regulatory bodies where necessary, we will ensure that our client achieves the most environmentally sound and cost-effective solution.

CONDER PRODUCTS

Our specialist commodity division offers a portfolio of products ranging from oil/water separators and small sewage treatment plant, to pumping stations and attenuation or storm water balancing tanks. Our Clereflo range of small-scale domestic sewage treatment plants serve 6-50 population equivalents, utilising either Activated Sludge Plant (ASP) or Submerged Aerated Filter (SAF) technology. Highly price-competitive, with minimal running costs, the Clereflo range is the low energy solution for applications where access to mains drainage is not available.

CONDER TECHNICAL SOLUTIONS

The capability of Conder's Technical Solutions division illustrates the breadth of the company's expertise and has established Conder as the authority in hi-specification projects. As a solutions provider our expertise extends across a product range that includes SAF technology unitank and modular sewage treatment systems up to 1800pe, Membrane Bioreactor package sewage treatment plants to 1000pe, attenuation, engineered vessels and other specialist tanks.

CONDER PUMPING SOLUTIONS

We offer a range of water and wastewater pumping solutions for domestic, commercial and industrial applications from off the shelf packages, through to custom-built pumping solutions.

SERVICE

Products installed to protect the environment must be maintained and serviced regularly to ensure that they continue to operate efficiently and effectively. Failure to do this will undoubtedly lead to pollution of the water environment, which is an offence and may result in prosecution. Through a nationwide network of British Water accredited engineers, Conder's service partners offer a full service and technical package which can include product support, commissioning, waste management and ongoing service and maintenance programmes.

let us make your environment
a better place to be...

demand special treatment

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