

ASP range



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

clereflo™ ASP 6-20



demand special treatment

Designed and tested in accordance with BSEN12566-3:2005 and with the British Water Code of Practice for Flows and Loads, the Clereflo ASP will serve a population range from 6-20 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 rural barn 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 kit
- Option for pumped influent or effluent
- Effluent Standard: 20mg/l BOD; 30mg/l SS; 20mg/l NH3
- Suitable for discharge to ground or watercourse (subject to Environment Agency consent)

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.

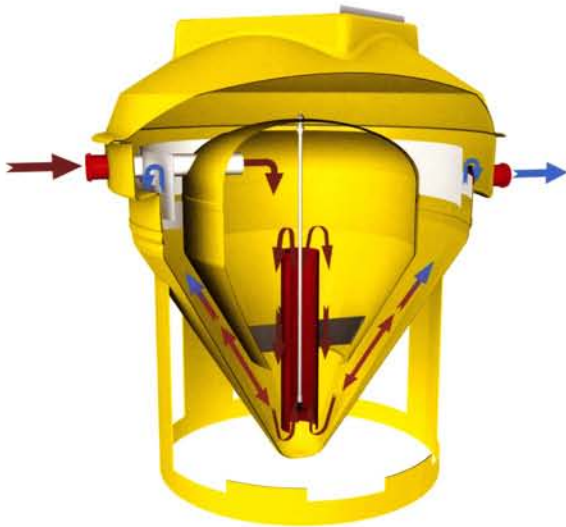
Standard range plants produce an effluent quality of 20mg/l BOD; 30mg/l SS; 20mg/l NH3. The correct plant should be selected to meet the requirements of the discharge consent granted by the Environment Agency, SEPA or EHS.

PRODUCT REFERENCE (pe)	MAX FLOW PER DAY (M <sup>3</sup> )	MAX LOAD PER DAY	
		BOD g	NH3 g
ASP06	1.2	360	48
ASP12	2.4	720	96
ASP16	3.2	960	128
ASP20	4	1200	160

## 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 is by gravity displacement. There are no moving parts in the treatment plant.



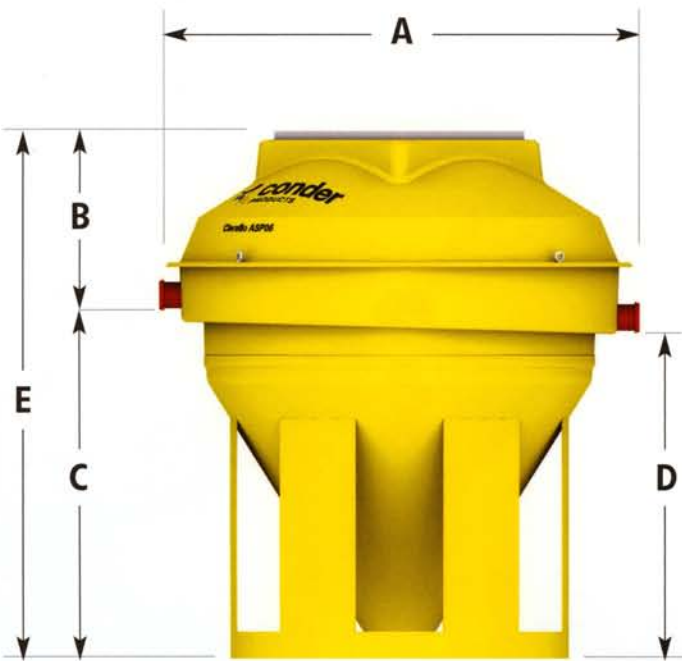
## installation

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 concrete 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 NIC EIC/Building Regulations).



# specification



CLEREFLO UNIT	ASP06	ASP12	ASP16	ASP20
Population Equivalent	6	12	16	20
Hydraulic Load (l/day)	1200	2400	3200	4000
Organic Load (g BOD5/per day)	360	720	960	1200
NH3 (g per day)	48	96	128	160
O/A Diameter (mm)	A	2080	2080	2080
Standard Inlet Invert (mm)	B*	780	780	780
Inlet Invert to Base (mm)	C	1500	1800	1900
Outlet Invert to Base (mm)	D	1400	1700	1800
O/A Depth (mm)	E*	2280	2580	2780
Pipework Fitting (mm)		110	110	110
Max Rated Power (Watts)		135	225	300
Estimated Power Consumption at working pressure (Watts)		100	170	220
Cover Size	750 SQ	750 SQ	750 SQ	750 SQ
Plant Weight	230kg	260kg	300kg	360kg

\* Deeper inverts can be accommodated 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 and 2.0m lengths. 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 recommends 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, Conder's partner Pims Service, offers a comprehensive range of services including commissioning and ongoing service contracts.

