

# WASTEWATER TREATMENT PLANTS

- Residential and commercial units available
- Highly effective certified performance
- Simple installation
- Low maintenance
- Virtually silent running
- Low energy consumption
- Gravity or pumped outlet
- 6, 8, 10 or 12 person domestic units
- Commercial units for up to 200 population

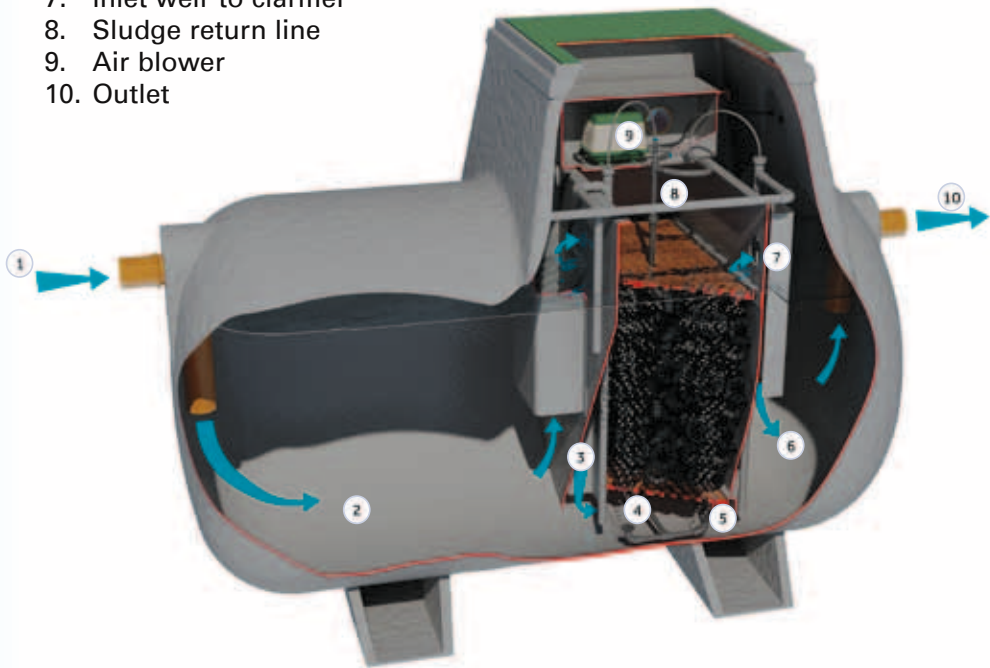
## Platinum Residential System

Waste water flows into the primary chamber where initial settlement occurs. Large solids then sink to form a sludge layer at the bottom of the tank. The settled liquid effluent passes forward for treatment in the aeration zone. The lightweight durable filter media in the aeration zone provides a large surface area where the naturally occurring micro-organisms develop into a thin biofilm layer.

Oxygen is pumped into the liquid effluent by a compact, highly efficient air blower supplying the oxygen required for the micro-organisms to develop and survive. As the sewage passes over the media, the micro-organisms act on it to reduce levels of BOD (Biological Oxygen Demand) and Ammonia (NH3), ensuring it reaches the necessary treatment standard.

| Model reference                 | APG6 | APG8 | APG10 | APG12 |
|---------------------------------|------|------|-------|-------|
| Poulation equivalent            | 6    | 8    | 10    | 12    |
| Max. BOD (kg/day)               | 0.36 | 0.48 | 0.6   | 0.72  |
| Daily design flow rate (m³/day) | 1.2  | 1.6  | 2     | 2.4   |
| Max. design flow rate (m³/hr)   | 0.15 | 0.2  | 0.25  | 0.3   |

1. Inlet
2. Primary settlement
3. Inlet duct to aeration
4. Aeration zone
5. Diffuser arrangement
6. Secondary clarifier zone
7. Inlet weir to clarifier
8. Sludge return line
9. Air blower
10. Outlet



Platinum domestic treatment plant



## Rainwater Harvesting and More

We have been experts in the rainwater harvesting field since the late 1990's and over the years have established a close working relationship with one of the country's leading manufacturer of wastewater treatment products.

This enables us to offer a wider range of products, including:

- Bypass separators
- Full retention separators
- Septic tanks
- Cesspools
- Pump stations
- Stormwater attenuation tanks



We are the UK's sole supplier of Wisy products for rainwater utilisation.

Wisy AG are leading German manufacturers of high-end specialist products.

# PLATINUM WASTEWATER TREATMENT PLANTS

## How it works

### Stage One: Primary settlement - Physical treatment

Waste water flows into the primary chamber where initial settlement occurs. Large solids then sink to form a sludge layer at the bottom of the tank. The settled liquid effluent passes forward for treatment in the aeration zone.

### Stage Two: Aerated filtration - Biological treatment

The lightweight durable filter media in the aeration zone provides a large surface area where the naturally occurring micro-organisms develop into a thin biofilm layer.

Oxygen is pumped into the liquid effluent by a compact, highly efficient air blower supplying the oxygen required for the micro-organisms to develop and survive. As the sewage passes over the media, the micro-organisms act on it to reduce levels of BOD (Biological Oxygen Demand) and Ammonia (NH<sub>3</sub>), ensuring it reaches the necessary treatment standard.

### Stage Three: Final settlement - Physical treatment

As the micro-organisms are regenerated, the oldest layer of the biofilm is removed from the media and passes with the effluent into the final chamber. Here settlement of this layer and any remaining solids occurs, reducing the levels of the SS (Suspended Solids) in the final effluent.

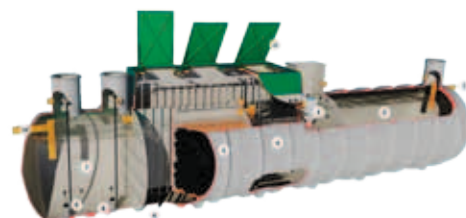
When these solids settle as sludge, they are returned via the sludge return system to the primary settlement chamber for storage. This application also allows enhanced treatment of the effluent as it is recycled through the system. The clarified liquid effluent then emerges from the Platinum system for an approved disposal method.

**All Platinum models are designed for the inclusion of an integral pump, for situations where a gravity overflow is not possible.**

A choice of 4 models is available in the domestic range:

| Typical Specification              |      |      |       |       |
|------------------------------------|------|------|-------|-------|
| Model reference                    | APG6 | APG8 | APG10 | APG12 |
| Inlet invert depth from cover (mm) | 750  | 750  | 750   | 750   |
| Inlet invert depth from cover (mm) | 850  | 850  | 850   | 850   |
| Inlet / outlet diameter (mm)       | 110  | 110  | 110   | 110   |
| Overall length (mm)                | 2200 | 2800 | 3000  | 3000  |
| Overall depth (mm)                 | 2100 | 2100 | 2100  | 2100  |
| Overall width (mm)                 | 1500 | 1500 | 1500  | 1500  |
| Power consumption (watts/hr)       | 49   | 65   | 80    | 100   |
| Sludge production (litres/day)     | 6.5  | 8.7  | 11    | 13    |
| Dry unit weight k(g)               | 250  | 300  | 350   | 350   |

### Larger capacity units



For use in commercial applications, a range of larger capacity plants are available for population from 15 to 200 people. See separate data sheet for details.

Distributor:

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