

Tel: 01278 671927

2 YEAR WARRANTY

# Synergy

WASTEWATER TREATMENT  
P R O D U C T S



EN 12566-Pt 3.  
Certified 96.2% average efficiency



Efficient, reliable, sewage treatment systems for all residential, commercial and Industrial applications





For any application, residential, commercial, industrial, where there is no access to a mains sewer, the **MATRIX** sewage treatment plant provides an extremely efficient, reliable and cost effective solution to sewage disposal. The **MATRIX** system is a single tank unit up to 300 residential population equivalent and a modular system for larger applications.

## Performance

With the imminent implementation of mandatory legislation, the **MATRIX** treatment plant has undergone extensive independent testing in accordance with EN12566-3 making it fully compliant with the new European Standard. It is important to note that the new standard relates to ALL units in the range from 6 person (residential equivalent) to 50 person (residential equivalent) and includes for process and structural testing, including installation in groundwater conditions. Unlike many manufacturers, The Company have had all **MATRIX** treatment plants in the range to 50pe fully tested in all aspects of EN12566-3 with the achievement of market leading results.

The **MATRIX** sewage treatment system is designed to achieve the minimum required effluent quality standard of 20mg/litre Biochemical Oxygen Demand (BOD) : 30mg/litre Suspended Solids (SS) : 20mg/litre Ammoniacal Nitrogen (NH<sub>4</sub>), which in European Standard performance testing relates to an efficiency of better than 94%, the certified performance of the **MATRIX** system is that it produces an average final effluent quality of 11mg/litre Biochemical Oxygen Demand (BOD) : 16mg/litre Suspended Solids (SS) and 7mg/litre Ammoniacal Nitrogen. This relates to an average efficiency ratio of 96.2%, better than most other manufacturers, with individual test efficiency results being as high as 98.8%. As part of the test procedure the **MATRIX** system was proven to have one of the lowest operating costs.

## Process

The **MATRIX** treatment system is a three stage biological process contained within a single tank structure, based on the principles of a submerged bed reactor and designed in accordance with the requirements of BS6297. Careful configuration of the internal flowpath and the inclusion of non-mechanical recirculation systems ensures optimal process performance as demonstrated by the exceptional results obtained from the independent testing, providing complete peace of mind for the end user. There are NO electrical or mechanical components within the treatment plant thereby eliminating the need for any specialist servicing arrangements ensuring that any maintenance requirements on the **MATRIX** system are kept to an absolute minimum.



CLF1 – 6pe Fully Installed.



CLF1 – 6pe Treatment Plant ready for delivery.



CLF9 – 70pe Treatment Plant being Loaded.

## Servicing & Maintenance

The **MATRIX** system has minimal mechanical components and therefore requires only simple maintenance procedures ensuring that, whether it is a 6 person unit or a 300 person unit, annual maintenance costs remain the least of your worries.



## TECHNICAL DATA

Model Ref	PE	BOD/day kg	Flow/day M3	Length mm	Width mm	Depth mm	Std Inlet mm	Weight kg	Blower Rating
CLF 1	6	0.36	1.20	1500 diameter		2100	110	250	60 w
CLF 2	12	0.72	2.40	1900 diameter		2100	110	350	80 w
CLF 3	18	1.08	3.60	2500 diameter		2100	110	600	120 w
CLF 4	25	1.50	5.00	4710	1500	2174	160	1200	120 w
CLF 5	30	1.80	6.00	4010	2124	2174	160	1400	0.55 kw
CLF 6	40	2.40	8.00	5060	2124	2174	160	1700	0.55 kw
CLF 7	50	3.00	10.00	5610	2124	2174	160	1900	0.55 kw
CLF 8	60	3.60	12.00	6010	2124	2174	160	2100	0.75 kw
CLF 9	70	4.20	14.00	6810	2124	2174	160	2200	0.75 kw
CLF 10	80	4.80	16.00	6760	2524	2174	160	2300	0.75 kw
CLF 11	90	5.40	18.00	7360	2524	2174	160	2650	1.10 kw
CLF 12	100	6.00	20.00	7760	2524	2174	160	2900	1.10 kw
CLF 13	125	7.50	25.00	8200	1500	2900	160	3000	1.50 kw
CLF 14	150	9.00	30.00	9200	1500	2900	160	3250	1.50 kw
CLF 15	200	12.00	40.00	10500	1500	2900	160	3400	2.20 kw
CLF 16	250	15.00	50.00	11500	2250	2900	160	3600	2.20 kw
CLF 17	300	18.00	60.00	12000	2400	2900	160	3850	2.20 kw

## MATRIX Benefits

- Free nationwide site surveys and technical proposal with no obligation.
- Full technical back up and customer service support.
- Free consent to discharge applications. (statutory fees only).
- Nationwide network of service engineers
- Supply only or full supply and installation through certified installers.
- Single tank installation to minimize costs
- Failure alarm systems as standard, not at additional cost
- GSM telemetry dial out alarm units available at small additional cost
- No mechanical or electrical parts within the unit.
- Robust Polypropylene construction for easy and cost effective installation
- No visual intrusion. Flat, flush ground level covers suitable for 1 tonne load.
- Simple installation in vehicular areas, up to D400 loading.
- Low running and maintenance costs
- Integral discharge pumps where required (all models) no additional tanks.
- Deep inlet inverts available to avoid pumping crude sewage to plant.

Tel: 01278 671927

# Synergy

WASTEWATER TREATMENT  
P R O D U C T S

Other products include:

- ⊗ Sewage treatment plants
- ⊗ Septic tanks
- ⊗ Cesspools & Storage tanks
- ⊗ Rainwater harvesting systems
- ⊗ Package pump stations
- ⊗ Oil-water separators
- ⊗ Grease traps
- ⊗ Storm water attenuation tanks
- ⊗ Dirty water settlement tanks
- ⊗ Silage effluent storage tanks
- ⊗ Above ground storage tanks

**T:** 01278 671 927  
**F:** 01278 671 963  
**E:** [info@synergy-wtp.co.uk](mailto:info@synergy-wtp.co.uk)  
**[www.synergy-wtp.co.uk](http://www.synergy-wtp.co.uk)**

Croom, Enmore Road  
Enmore, Bridgwater, Somerset.  
TA5 2AN

Your local distributor is :-

