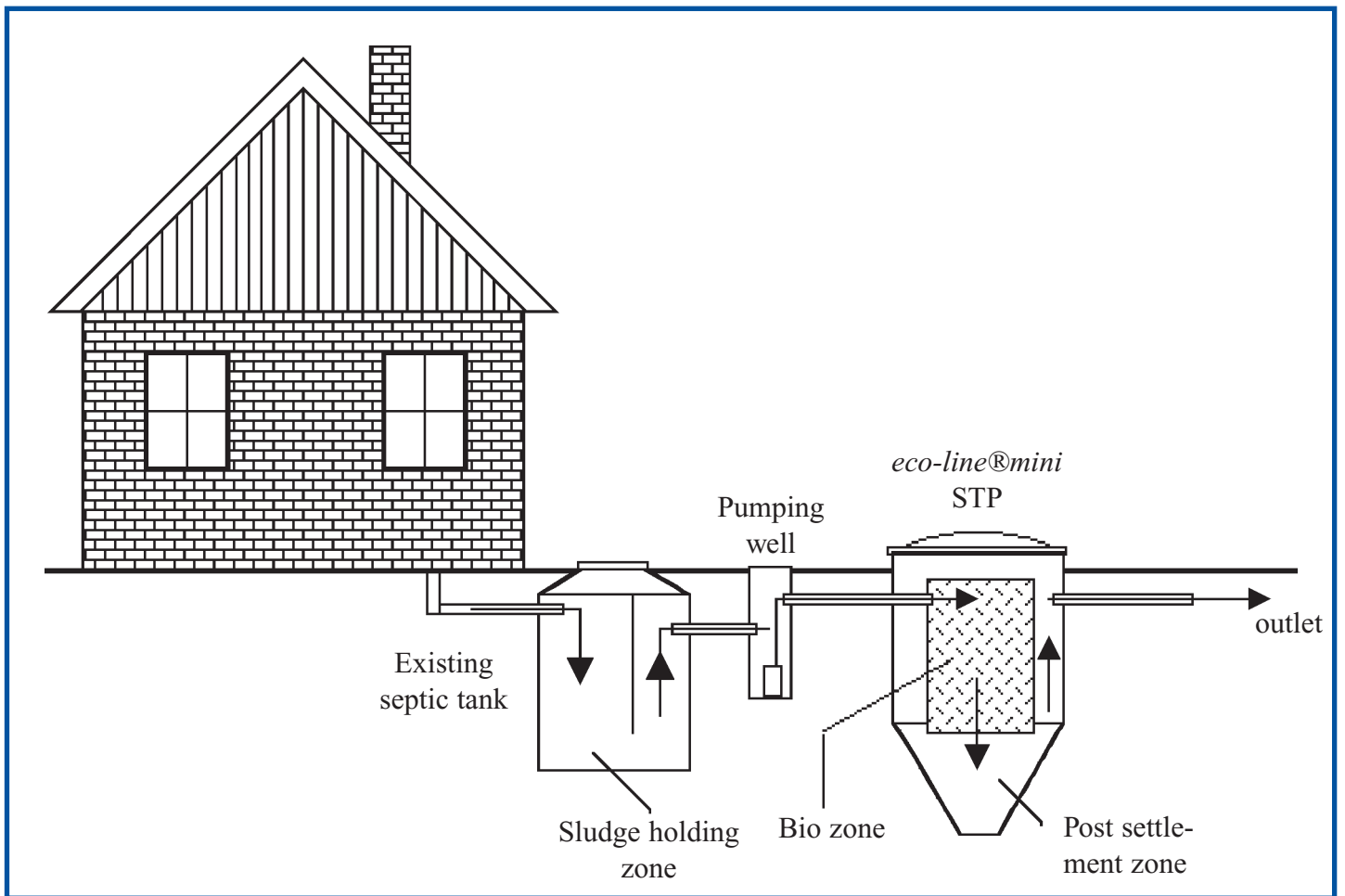


# eco-line<sup>®</sup>

Sewage Treatment Systems

## mini





*Individual Dwelling Installation: eco-line®mini treatment plant installed after an existing septic tank.*

# eco-line®mini

## SEWAGE TREATMENT PLANT

*- The eco-line®mini can achieve the demand for sewage treatment from individual houses*

### General...

eco-line®mini is a series of small treatment plants developed especially for individual houses in isolated areas. The range has 4 plant sizes covering the treatment requirements from a single house up to approximately 30 households.

eco-line®mini treatment plants have been designed to meet the demand from regulatory authorities in remote locations.

eco-line®mini treatment plants are biological treatment plants which operates on the fixed

film principle. The degradation of dissolved organic

matter is carried out by micro-organism growing on a submerged aerated filter in the sewage.

**All components are constructed of corrosion resistant materials**

●

**Calculation of strength has been performed by Danish Technological Institute**

●

**All plants pass through an extensive quality control assessment**

### Mechanical Treatment...

The sewage from the dwellings will initially be mechanically treated in a septic- or holding tank. (An existing structure will often be suitable).

Gross solids will settle and floating particles will also be retained. The liquid phase will pass through an overflow in the tank to a pumping well where a submersible pump automatically transfers the sewage to the biological unit.

### Biological Treatment...

The biological unit is located in a vessel with an air diffuser and

a filter. The filter has a very large surface on which the micro-organisms grow. The diffuser, at the bottom of the vessel, supplies air to maintain an aerobic environment for the micro-organisms to metabolise the contaminants.

The air also agitates the sewage and prevents the filter from clogging. The vessel segregates the aerated, turbulent water from the settlement zone in the post settlement unit. The sewage enters the post settlement unit through an opening in the bottom of the vessel at a rate proportional to the sewage entering the biological unit.

### **Post Settlement...**

Solids in the treated sewage collect in the conical bottom in the post settlement unit. Periodically settled sludge is pumped from the base of the post settlement unit to the septic or holding tank.

Clarified final effluent discharges from the post settlement tank through a submerged overflow pipe to the receiving water course, thereby ensuring that floating particulates are retained within the post settlement unit.

### **Chemical Treatment...**

Phosphorous removal can be achieved by dosing the sewage with precipitation chemicals at the inlet. Flow proportional dosing equipment can be supplied.

### **Supersision...**

The eco-line®mini treatment plants re-quire minimal attention for reliable operation. The plant can be equipped with an automatic monitoring equipment to alert the householder in the unlikely event that a fault should arise.

### **Guarantee**

The tanks and the other components are constructed from corrosion resistant materials and are covered by warranties in accordance with international standards.

*The picture shows an eco-line® mini sewage treatment plant for 5 PE (a single house).*

*The outer tank is constructed with a build in foot for easy handling and buoyancy control.*

*After installation only the covers will be visible.*

*The 5 pe eco-line mini sewage treatment plant comes in several different colours.*



## **Facts about**

**eco-line® mini**  
SEWAGE TREATMENT

•  
**Easy and Low  
Cost Installation**

•  
**Low Energy  
Consumption**

•  
**No Noise  
Nuisance**

•  
**No Odour**

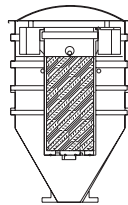
•  
**Proven  
Reliability**

•  
**Optional  
Phosphorus  
Removal**

•  
**Optional  
Automatic  
Monitoring**

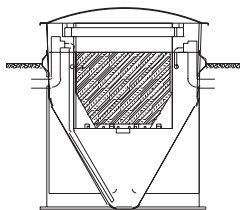
•  
*eco-line* systems  
are manufactured by  
**AEC** aps, Denmark  
[www.aec.dk](http://www.aec.dk)

# eco-line<sup>®</sup> mini Sewage Treatment Systems



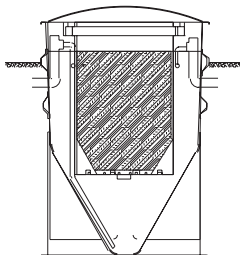
## Type 5 PE

Dimensions	ø1400x2200 mm
Hydraulic capacity	125 l/h – 1.250 l/day
Organic capacity	300 g BOD/day
Power consumption	approx. 30 W/230 V
Weight	approx. 100 kg
Material (exterior)	PE (polyethylen)
Material (interior)	PE



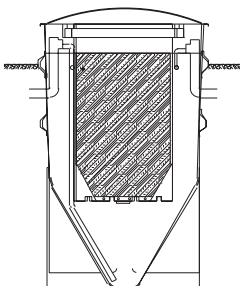
## Type 15 PE

Dimensions	ø2100x2200 mm
Hydraulic capacity	375 l/h – 3.750 l/day
Organic capacity	900 g BOD/day
Power consumption	approx. 50 W/230 V
Weight	approx. 300 kg
Material (exterior)	Fibre Glass
Material (interior)	PE



## Type 35 PE

Dimensions	ø2100x3000 mm
Hydraulic capacity	875 l/h – 8.750 l/day
Organic capacity	2.100 g BOD/day
Power consumption	approx. 200 W/230 V
Weight	approx. 500 kg
Material (exterior)	Fibre Glass
Material (interior)	PE



## Type 50 PE

Dimensions	ø2100x3600 mm
Hydraulic capacity	1.250 l/h – 12.500 l/day
Organic capacity	3.000 g BOD/day
Power consumption	approx. 300 W/230 V
Weight	approx. 600 kg
Material (exterior)	Fibre Glass
Material (interior)	PE

*The connection of two or three sewage treatment plants around a distribution well provides a capacity for approx. 30 houses. All plants can be supplied with equipment for chemical treatment (phosphorous removal) and malfunction alarm*



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