

Ri-Industries

618-622 South Rd, Angle Park S.A, 5010

Ri-Industries are pleased to introduce the latest in aerobic waste water treatment systems, which we consider to be one of the finest systems introduced in Australia. The "Ri-Treat" mono-cast tank construction and aerobic treatment together have produced a very reliable, affordable and environmentally friendly domestic treatment system, with numerous benefits and features.

The tanks are produced by Ri-Industries (a well established South Australian partnership of companies with over 55 years experience in the concrete and tank industries).

The "mono-cast" construction we believe is unique to our company, and has meant that we can produce a reliable tank with integrally cast baffles, which are as strong as the rest of the tank. Prior to this tank being constructed, the norm was to use a concrete tank of suitable size, then fit either fibre-glass or separate concrete baffles within the tank. These add on baffles then require to be sealed, to enable the tank to operate as it was designed to do. The sealing, was at times, not adequate and allowed the baffles to move and leak between chambers within the tank. This of course means that the system fails to operate as it should, and potentially un-treated effluent could be pumped out into the environment. This is, of course, not possible with the "Ri-Treat" system.

The Ri-Treat system uses quiet, proven, reliable, submersible pumps and air pumps within the system, and is inexpensive to operate. Service is required on a quarterly basis, as defined by the Health Commission, and is performed by a member of our trained service personnel. This initial cost of 4 services is included in the cost of your system i.e. the commissioning of the system and 3 regular services. The system incorporates a neat, and safe, low voltage alarm control pad which alerts the occupants, by means of a mutable, audible visual alarm, of any problem with the system operation. Should the need arise, we offer 24 hour contact and quick response breakdown service by our service provider.

The operation of the unit has other unique features, such as automatic sludge and skimmer returns, and the use of superior bio mass producing media, and long storage capacity of disinfecting compounds, and a unique, optional, emergency outlet for effluent should there be a rare pump failure. The emergency outlet allows liquid to run into alternative disposal rather than flooding the system with the disinfected irrigation liquid, but triggers the alarm system to alert the occupants that there is a problem which requires attention with in a safe 24 hour period, before the system could become cross contaminated. (Most existing systems can give only some hours warning of cross contamination or other failure).

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Other major differences to other systems include:

Extended Warrantee is available on pumps above the standard One year.
Warrantee on tanks.....ten years.
Warrantee on components.....five years.
Warrantee on controls.....two years.
Warrantee on air pump.....two years.
Warrantee on submersible pump or optional pumptwo years.

Description of plant:

All waste water is gravity fed into the Primary Sewage Chambers (1&2) where it undergoes settlement and digestion during a retention time of approximately 24 hours. The settled waste water then flows into the two retention chambers. Air is pumped into the aeration chambers via strategically placed fine bubble diffuses which allows for the maximum aeration of the effluent and creates turbulence within the chamber. This turbulence causes the liquids to travel in a circular motion through bio media which encourage the bio-mass growth. Bio-mass assimilates nutrients and oxygen from the water, leading to a gradual reduction of impurities as the effluent passes through the system.

The effluent and sludge then passes into the settlement chamber, where the sludge settles to the bottom before being returned to the primary chambers, along with the scum which floats on the settlement chamber. The settled effluent then passes through the chlorinator into the irrigation chamber, where it is held for automatic irrigation or other means of disposal. The scum and sludge are returned to the primary chambers by means of a very effective return system which keeps the system functioning during periods of up to three months, to allow for non occupancy over this period.

The return system has a three fold purpose:-

1. Excess sludge is returned to the primary sewage chambers for storage and digestion.
2. Clean effluent is recycled through the plant, this tends to suppress odour emitting micro-organisms.
3. By regular recycling effluent, the circulating bio-mass in the aeration chambers is being fed with stored organisms from the primary sewage chambers. This keeps the micro organisms at a maximum population level and reduces the problems of the treatment plant not being used for extended periods. i.e. holidays. Untreated effluent is then prevented from being discharged from the unit when the occupants return from extended periods of non use.

The treatment tank:

Is manufactured from concrete in a mono-cast process. The baffles, floor and walls are cast in the one operation with in fine tolerance steel moulds, which produce reliable wall thicknesses etc. Incorporating primary septic chambers of 3,250 litres or 4,250 litres aeration chambers of 2,500 litres, settlement chamber of 400 litres and irrigation chamber of up to 400 litres.

The pumps:

The standard irrigation pump used is a Grundfos AP12 or a Lowara DIWA stainless steel submersible pump which gives a "head" of some 14 metres. The manufacturers standard warrantee of 12 months is extended to 24 months because of the high quality of effluent being passed through the system.

The aeration pump used is a Nitto Linear 80B - 80 litre air pump which has been found to be both reliable and efficient in their operation. Spare parts are available at reasonable prices. The Nitto air pump runs normally 24 hours per day and uses approximately 85 watts of power per hour.

The routine maintenance:

The health authorities require all aerobic waste water systems to be "serviced" every quarter (3 months) by trained operators from the date of commissioning. Once the system is commissioned, it is then placed on our routine maintenance schedule.

The installation:

Ri-Industries offer installation services on many levels. We will supply as little assistance as you request, in supplying the whole system on a "do it yourself " basis, up to fully contracted installations, only the price varies to reflect the level of the assistance required.

- 1/. "D.I.Y." sample site drawings supplied.
- 2/. Assistance to complete application documentation plus "DIY"
- 3/. Assistance as above plus excavation and placement.
- 4/. Assistance excavation placement, hook-up plus electrical work.
- 5/. All of the above plus irrigation installation.
- 6/. All of the above plus landscaping.

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Installation should be arranged by the customer through a registered drain layer – plumber Ri-Industries has a list of these specialists in all areas. A site inspection can be arranged (which is done without obligation in the near metropolitan/country areas).

We will be pleased to forward further information, and assistance to you on request. Should you desire any further information check our website or telephone for our other products and, or services please feel free to contact us on:

Email: sales@ri-industries.com.au

Telephone: (08) 8445 7822

Or

Fax: (08) 8268 2335.