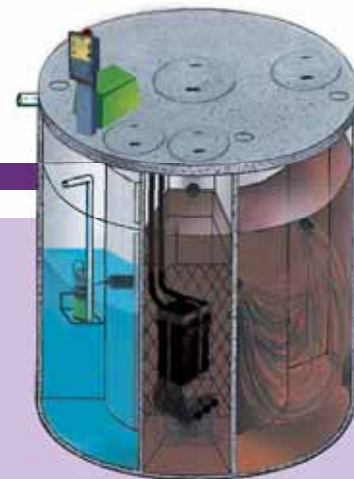


The Ultimate Environmental Solution



Taylex™ DMS Domestic Membrane System

An Advanced Secondary Home Sewage Treatment Plant
with Nutrient Removal

The Taylex DMS produces the cleanest water from a domestic treatment system in Australia today

Our Domestic Membrane System (DMS) can be used in environmentally sensitive areas. This system allows reduced set-back distances for small blocks, or blocks with natural watercourses &/or neighbours in close proximity. This system has 2 forms of disinfection (Membrane Filtration and UV Light) neither of which leave any chemical residue.

★★★★★
Clearly the Winner!

The 5 Star Process

Step 1: All waste from the home enters the primary pre-treatment chamber of the Taylex System with liquid then flowing into the secondary chamber. The time that waste spends in both these anaerobic chambers allows bacterial action to condition it before it flows into the aeration chamber.

Step 2: In the aeration chamber an air blower introduces oxygen into the liquid creating an aerobic process where bacteria grow and digest solid waste. At intervals governed by the water flow the liquid will be pumped through the ultra-filtration membranes to the irrigation chamber.

Step 3: Biological nutrient removal is achieved by recirculating liquid between the aerobic membrane chamber and a de-nitrification chamber. Phosphorus removal is achieved by withholding all sludge.

Step 4: The liquid that has entered the irrigation chamber is constantly recycled through a continuous disinfection process using ultra-violet light and then recycled back to the environment via spray or underground irrigation. The ultra-filtration membrane is the primary disinfection process.

Low nutrient,
absolutely clear,
odourless,
recycled water
for irrigation

Tank Construction – All Concrete	
Height	2300mm
Inlet Invert (from Base)	1830mm or 1530mm
Tank Diameter	2450mm
Maximum Dry Weight	6.25 tonnes
Maximum Hydraulic Loading	2,000Lt/day - 10 Person
Operating Capacity	5,870Lt
Total Tank Capacity	8,100Lt

Australian Standards & Test Results

Effluent
Grade

Advanced Secondary
+ Nutrient Removal

	Australian Standard	TAYLEX DMS
BOD5 Biological Oxygen Demand Over 5 Days	< 10 mg/L	< 4.8mg/L
TSS Total Suspended Solids	< 10 mg/L	< 1.27mg/L
Thermotolerant Coliforms	< 10/100mL	< 0.03/100mL
Nitrogen	< 10mg/L	< 6.19mg/L
Phosphorus g/m3	< 5mg/L	< 0.29mg/L
Turbidity Clarity	n/a	0.43NTU

15 Year Warranty

Every Taylex Domestic Membrane System is covered by a full manufacturers warranty. There is a 15 year warranty on the pre-cast concrete tank and a 2 year* warranty on all electrical and mechanical components including the irrigation pump. (*12 months standard warranty and a further 12 months extended warranty when you purchase your second year service contract with a Taylex approved service provider). Warranty applies from the date of commissioning.



Wastewater & Rainwater Specialists

Taylex™
Tanks

Manufacturing Tanks Since 1969

www.taylex.com.au

1300 660 225 AUSTRALIA WIDE

Key Points

Ultra Filtration Membranes together with UV
Protects your family and Protects the environment




TaylexTM
Tanks

www.taylex.com.au

Features

Benefits

Large Tank	→	Longer retention time = Better treatment
One Pour Mould	→	No leaking internal walls= No cross contamination
Multiple Baffles/Chambers	→	Longer retention time - reduction of fats, oils & grease (FOG)
Multiple Inverts	→	Saves \$\$\$\$ and Reduces need for riser rings
Ultrafiltration Membranes 35 nano metres (35millionths of a millimetre) - Physical Barrier	→	Protects the family - Smaller pore size than bacteria and some viruses
Very Low Total Suspended Solids	→	Better for effective UV disinfection and re use applications
Very Low Total Phosphorus	→	Protects environment and reduces Land Application Area by approx 75%
Very Low Total Nitrogen	→	Protects environment and reduces Land Application Area by approx 30%
Very Low Turbidity 0.43NTU (clarity)	→	Better for effective UV disinfection and re-use applications Town water turbidity = 4NTU
UV Light	→	Protects the family - Kills Viruses *chlorine at the rates allowed DOES NOT kill viruses
Water Quality NOT dependent on Biology	→	Protects the family - Physical Barrier - chlorine loses effectiveness when pH and SS are incorrect
Flow Related	→	Working level float operates Blower and Filtrate pump - corrects biology and reduces running costs
System is Adjustable	→	Can be easily adjusted for varying loads/family sizes
Membrane has a proven life of over 10 years	→	Martin Systems in Germany - Si Claro Membrane Filter Module is nearly 11 years old and still in the field
Membranes Thermal Welded	→	Not Solvent (GLUED) which break down in the biology - biodegradable - Very Strong and Robust
Two Manifolds in Membrane Pack	→	Even suction over whole of membrane sheet - longer life - better performance
Constant Plate Separation in Membrane	→	Most effective for air scouring
Stainless Steel Frame housing Membrane	→	Long lasting - Durable
Custom Made EPDM (rubber) Difussers for Air	→	Controlled air bubble size to have most effective air scouring
Nitto Piston Blower (Air Pump)	→	Quiet, long lasting , no diaphragms that need to be replaces every 18 months
Sealed Irrigation Chamber in Tank 	→	Guaranteed water quality

Extra facts about our Domestic Membrane System:

- The ultra-filtration membrane is a physical barrier separating solid particles from liquid. The defined pore diameter of the membrane is only thirty-five millionths of a millimetre (0.000035mm). The ultra-filtrating membrane is an absolute barrier for suspended solids, bacteria & large virus. The smallest molecules, metallic ions and dissolvable salts essential for life can pass the ultra-filtration membranes unhindered.
- We use flat sheet membranes derived from organic polymers that are very effective, these are combined with the unique filter module construction which prevents clogging due to hairs, fibres or other coarse substances.
- Nutrient Removal is important to the environment as excess nutrients will alter soil characteristics unfavourably and cause algal blooms in water. The Taylex DMS reduces nitrogen & phosphorus level to well below the Australian Standards ensuring the safety of your family and minimises pollution of our waterways and environment.