

ROADTRAIN® PACKAGED SEWAGE TREATMENT PLANTS



Roadtrain® packaged plants by Hydroflux Epco have been in operation since the late 1960's. Applications include sewage treatment for towns, villages, resorts, mine sites and gas exploration fields.

The systems are designed to operate with a minimum level of site attendance and are ideally suited to remote locations.



DESIGN CONFIGURATIONS

Roadtrain® packaged plants are available in three process designs as follows:

- Extended Aeration Activated Sludge Process
- Rotating Biological Contactor
- Membrane Bioreactor

The selection of the most appropriate process is dependant upon the available footprint, site location and discharge requirements

KEY FEATURES

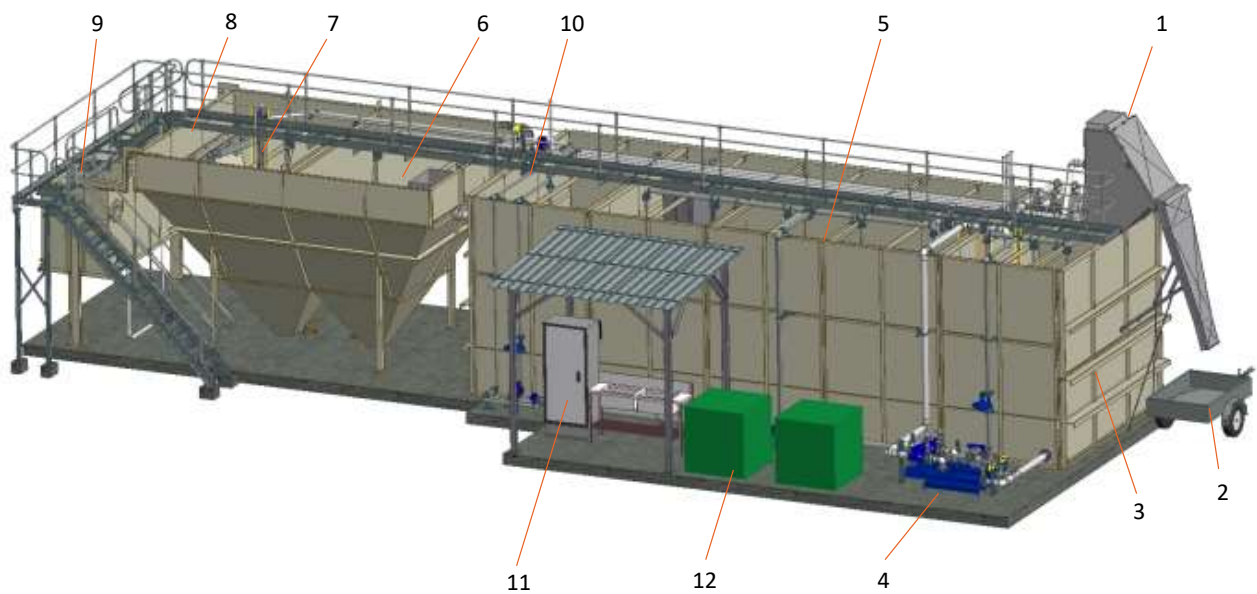
- Extensive expertise with specific designs for remote locations
- Robust construction, proven throughout Australia, the Middle East, Pacific Islands and South East Asia
- Unattended operation
- High discharge water quality (options for Class A reuse)
- Special bolted designs for very remote locations
- Easily shipped to anywhere in the world
- Remote monitoring available with HyConnect®

APPLICATIONS

- Towns and Villages
- Resorts
- Mining Accommodation Camps
- Oil Exploration Fields
- Development Estates



TYPICAL COMPONENTS



- | | | |
|---|-----------------------------|----------------------------------|
| 1 Inlet Screen | 2 Screenings Trailer | 3 Balance Tank |
| 4 Forward Flow Pumps | 5 Aeration Tank | 6 Clarifier |
| 7 Airlift Driven Sludge & Scum Returns | 8 Effluent Trough | 9 Chlorine Detention Tank |
| 10 Waste Activated Sludge Digester | 11 Control Panel | 12 Blowers |

REFERENCES



Masig Island, QLD Australia

- 135 m³/d capacity
- Marine discharge to Great Barrier Reef with partial reuse
- Based on RBC technology



Lihir Island, PNG

- 600 m³/d capacity
- Based on circular bolted design with central clarifier
- Environmental discharge



Marmul Oilfield, Oman

- 350 m³/d capacity
- Extended aeration process



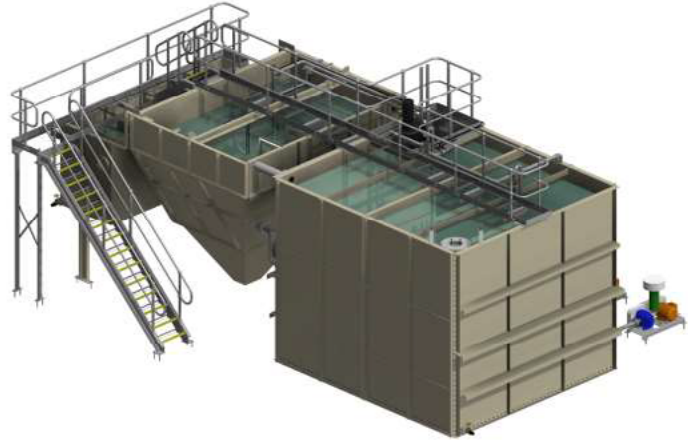
Channel Island Power Station, NT Australia

- 1 x 30 m³/d system
- Extended aeration packaged plant

SYSTEM DESIGNS

Rectangular Design

- Extended aeration process. Can be configured for nutrient removal
- Optional bolted design to allow flat packing and shipment to very remote locations
- Simple onsite installation
- High quality effluent discharge with optional tertiary systems for reuse
- Remote monitoring with HyConnect®



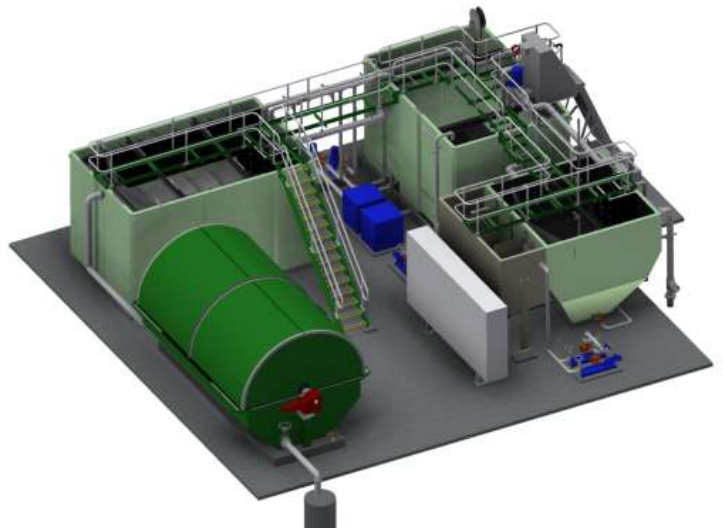
Circular Design

- Extended aeration process. Can be configured as MLE process for nutrient removal
- High Capacities up to 5000EP
- Optional bolted design to allow flat packing and shipment to very remote locations
- Simple bolted connection onsite
- High quality effluent discharge with optional tertiary systems for reuse
- Remote monitoring with HyConnect®



Rotating Biological Contactor Design

- Ideally suited for unattended sites in remote locations
- Inclusive of primary and secondary clarification steps
- Can be configured for nutrient removal
- High quality discharge with optional tertiary treatment
- Low operating costs



OPTIONAL FEATURES



Inlet Works Screening

Raw sewage is either screened using a static screen or an automatic mechanical screen.

Grit removal can be incorporated in the mechanical screen package.



Sludge Management

Typically pumped to a storage tank for offsite disposal, or to drying beds for dewatering and drying.

Options for digestion and mechanical dewatering are also available.



Water Reuse

Tertiary treatment with sand or membrane filtration can allow reuse for fire fighting, toilet flushing or irrigation.



Aeration Systems

Typically fine or medium bubble submerged diffusers.

BUILD SPECIFICATION

Roadtrain® packaged plants are typically fabricated from painted steel, in either fully welded or bolted configurations.

The following table summarises the major components and their materials. Variations on the material specifications can be made, please consult Hydroflux Epco for further detail.

Section	Specification
Inlet Screen	Stainless Steel
Balance Tank	Painted Steel Tanks
Reactor Tanks	Painted Steel Tanks
Pipework	PVC/ABS
Diffusers	Stainless Steel / PVC
Clarifier Internals	Stainless Steel Wetted Parts
Sludge Drying Beds	Concrete

ENGAGE PROFESSIONALS

Engaging a professional wastewater treatment company to look after the entire wastewater project is a convenient, economical and hassle free option for industry.

Hydroflux Epco can provide all process design works, manufacture and fabrication, construction and even complete operation of your wastewater treatment plant.

When Hydroflux Epco provides complete solutions, we can either undertake a contract on a turnkey basis or work together with building services engineers and other construction professionals to ensure that the project is delivered smoothly, without interruption and on time.



Hydroflux is a sustainability driven organisation delivering unrivalled engineering, scientific and technological solutions for a more secure future, with a focus on water, wastewater, renewable energy, climate resilience and environmental protection.

Hydroflux Epco is an experienced municipal wastewater treatment company. Our goal is to provide high performing, sustainable energy efficient equipment and technology for maximising life cycle value and reducing operational costs.

Provides municipal clients and contractors a sustainable and diverse range of water and wastewater screening, solid liquid separation, sludge handling and biological treatment equipment and solutions from Australia and around the globe.

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