



EL WATER RECYCLING PLANT

High capacity, low maintenance water recycling plant engineered to treat and recycle most wash bay and industrial wash effluents.

OVERVIEW

Enviro Concepts Water Recycling Plants are high capacity water filtration and polishing systems designed to remove suspended solids, oil & grease, BOD, COD, and metals from most wash bay and industrial wash effluents to produce high quality water suitable for re-use.

These containerised or skid mounted plants are pre-engineered, pre-assembled and factory tested minimising site installation and start-up time. Designed for minimal operator involvement and low operation and maintenance costs.

The EL range incorporates proven water pH correction and disinfection systems, high capacity oil-water separation and advanced media and/or membrane filtration in a packaged system that is adaptable for most wash water effluents and water recycling requirements.

APPLICATIONS

- Treatment for Mine Vehicles and Equipment
- Industrial and Mechanical Wash Treatment
- Light and Heavy Vehicle Washdowns
- Storm and Ground Water Treatment
- Logistics and Hire Companies
- Quarantine & Weed/Seed Hygiene
- Energy Suppliers, Resource Industry
- Recycled Water Treatment

FEATURES

- Containerised or Skid Mounted
- Effluent Collection and Solids Settling Tanks
- pH Correction System
- Chlorine or UV Disinfection System
- Continuous Media Solids Filter
- High Capacity Oil-Water Separator
- Deep Bed Media Filtration
- Polishing Process Tank
- Recycle Water Feed Pump

OPTIONS

- Dissolved Air Flotation (DAF)
- Ultrafiltration (UF)
- Reverse Osmosis (RO)
- Water Softening
- Ion Exchange (IX)
- Bio Reactor

SPECIFICATION

Model	EL Range
Feed Water Source	Industrial wash effluent, wash bay effluent, mine vehicle wash effluent, etc.
Flow Capacity	EL25: 25L/min EL50: 50L/min EL100: 100L/min
Dimensions	6m x 2.4m 2.4m (Containerised), 2.3m x 1.1m x 2.2m (Skid-Multiple)
Dry Weight	Approx. 5 Tonne
Power Requirements	240 or 415 volt, 43 Amps, 5.0 kW
Operating pH	6 to 10 pH (pH correction will eliminate pH inconsistencies of raw effluent)
Operating Temperature	Maximum 40 deg C (higher temperature can emulsify the oils and grease)
Inlet - Suspended Solids	200 to 1,500 mg/L (with peaks up to 5,000 mg/L)
Inlet - Fats, Oils & Grease	200 to 2,000 mg/L (with peaks up to 5,000 mg/L)
Filtration Pore Size	15 µm for the CMS 5 to 10 µm equivalent pore size for the Deep Bed Media Filter
Suspended Solids Reduction	Up to 95% (for EL100)
BOD, COD reduction	Up to 80% (with Bioreactor option)
Fats, Oils and Grease reduction	Up to 95% (for EL100)

CUSTOMISE YOUR WATER RECYCLING PLANT

EnviroConcepts' standard recycling plant is designed for most wash bay and industrial wash effluents. From our range of water treatment and filtration products, we can customise your plant to find the right solution for your needs.

Components	Standard EL100	Options & Upgrades
Flow Capacity	100 L/min (6 m ³ /hr)	25 50 or 100/min
Equalisation & Effluent Storage	Solids Settling Tank	Single or multiple
Solids Removal	CMS Filter	DAF
Oil Removal	Oil-Water Separator	DAF
Metals Removal		DAF
Biological Treatment		Bioreactor
Water Polishing	Deep Bed Media Filter	Water Softening Ion Exchange
Membrane Filtration		UF RO
Disinfection System	Chlorine Dosing	UV Disinfection
Chemical Dosing System	pH Correction System	Coagulant Dosing (for DAF) Flocculant Dosing (for DAF) Antiscalant Dosing (for RO) SMBS Dosing (for RO)
Chemical Requirements	EnviroBase EnviroAcid Enviro Chlor	EnviroCoag EnviroFloc Antiscalant SMBS
Media Requirements	CMS Filter Paper EnviroDex	Ion Exchange resin
Installation	Containerised	Skid Mounted