



V5 Hybrid Seabin Tech Overview

The V5 Seabin is named the V5 Hybrid aptly for its adaptability in various conditions and alternative energy options.

After last year's intensive technical development phase, the team now have an optimized and commercially viable product that can be adapted to both a floating dock and a fixed dock with tidal range not posing a problem to the V5 Hybrids operation.

The V5 Hybrid will be Seabins first widely anticipated flagship product, the first of multiple Seabin models dealing with various conditions on the water. The term "Hybrid" is also fitting with the Seabin being adaptable to multiple alternative energy options. The team has commenced research and development into reducing the energy consumption, currently 110V/120V is needed to provide power to the electrical box which is then converted to power the 12V submersible water pump, wind and solar options are an effective solution for the running of the Seabin V5 Hybrid in ideal geographical locations and the addition of a micro hydro turbine will also decrease the carbon footprint of the V5 Hybrid whilst reducing costs for the marinas who will be running the Seabins.

The 12 Volt submersible water pump is a highly respected brand with an outstanding reputation for quality products. The flow rate is 15,000 liters per hour whilst drawing minimum current. The expected cost of running solely on shore power is around 30 to 50 cents per day.

With the use of rotational molding of the Seabins and using PE plastic, enables the option of using recycled plastic and more advanced engineering practices, the team is trialing recycled PE plastic at the moment using 40% captured ocean plastics and 60% captured land plastics. The goal is to have Seabins produced from the plastics collected by the Seabins.

The woven cloth catch bag which sits inside the V5 Hybrid and easy to lift by one person even when full is made from a durable natural fibre called Hessian or Jute and is currently capturing micro plastics down to 2mm in diameter.

Seabin is currently trialing fish deterrent technology to ensure the marine life is safe around the V5 hybrid but to date this has not been an issue.

The molds have been ordered and the tooling is underway now, it will be a ten week process until we see the very first Seabins assembled.

This will see the pilot partners having the V5 Seabins installed in their locations around the 3rd to 4th week of April.

Currently the V5 Seabin is designed for marinas and calm areas only however the plan is to have modified technology for future Seabins so we can be more efficient with capturing the floating litter populating the oceans we all love so much.

For cleaner oceans.