佳作
Honorable Mention

▶ 網路票選人氣獎第一名
1st of internet vote

Brea-Ocean水中清網計畫

Brea-Ocean Fishing Net Cleaning Plan

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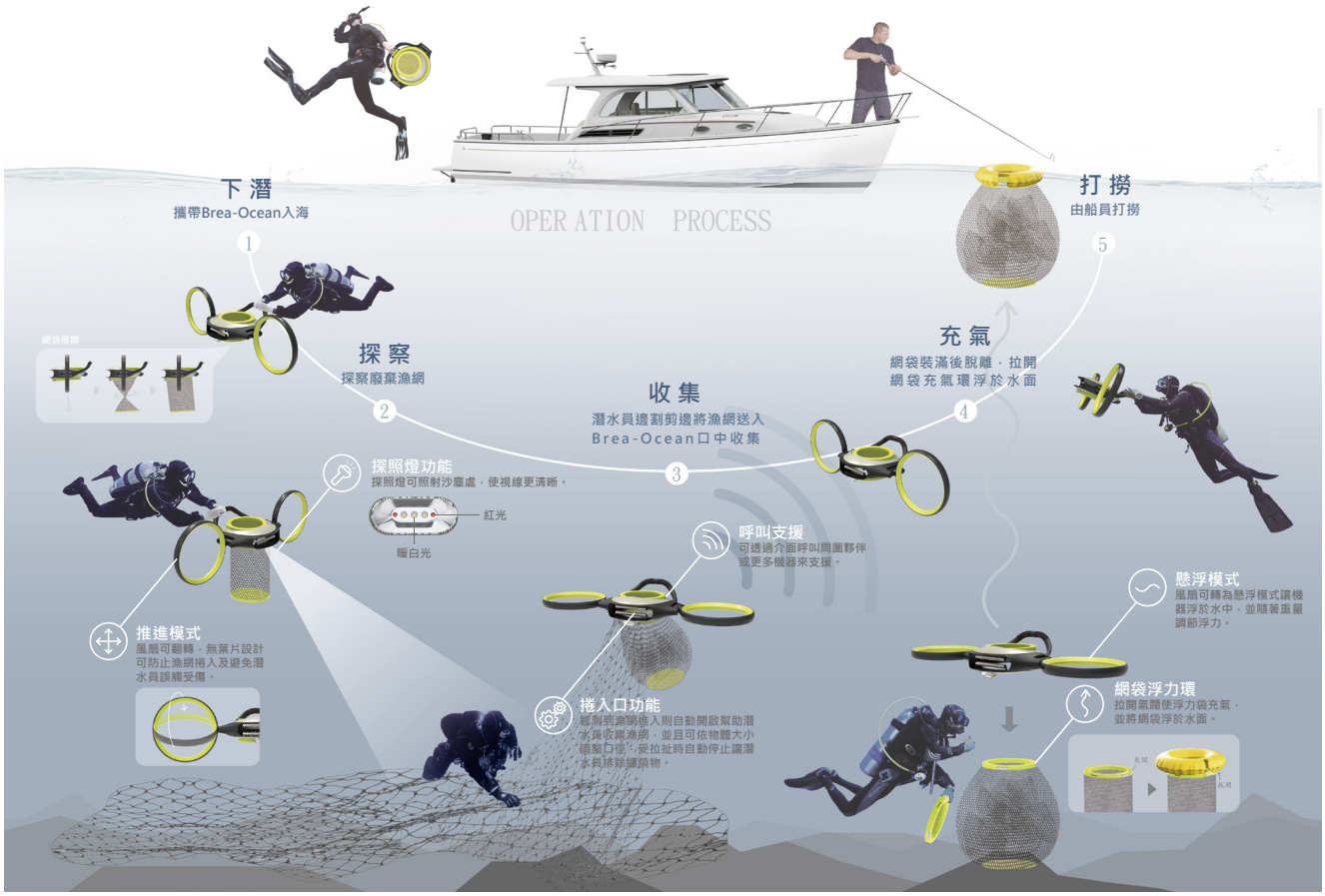
廢棄漁網在海中漂流造成的生態破壞稱為「幽靈捕撈」，現今漁網清理的方式普遍都由潛水員親自下海，以土法煉鋼的方式將其從海底撈起，但漁網的廢棄量依然相當驚人，過程耗時費力，也有許多危險性。本設計Brea-Ocean考量清網流程，結合推進與快速集網功能以及AI 人工智慧，提升打撈效率，讓海洋重新呼吸。產品的主要特色：（1）減少人力並相互支援—運用AI 科技搭配潛水員作業更便利（2）提升工作效率—快速集網及充氣機制 （3）方便收納及攜帶—機身可折疊收納不佔空間。

Abandoned fishing nets can cause damage to the marine ecology and lead to “Ghost fishing” . Nowadays, the most common way to clean-up the abandoned fishing nets is to salvage them from the water directly. However, it takes a lot of time and manpower to do it and the divers may confront dangerous situations while salvaging the fishing nets. Thus, we designed Brea-Ocean, a machine which combines Propeller, Nets Collecting Device and Artificial Intelligence (AI) technologies to assist divers to move faster under the sea and clean up the nets efficiently. Moreover, it will reduce the damages during the cleaning process, and clarify our ocean. The features of Brea-Ocean: (1) Reduce manpower and support the divers – Divers can work more conveniently by using Brea-Ocean, and messages can be sent to other divers or machines nearby for support through the device’s AI system. (2) Improve work efficiency – Increase the processing speed of net-collecting and oxygenation mechanism system. (3) Convenient for storage and easy to carry - The fan on both sides of the product can be fold for storage and allows divers to carry it easily.

add the oyster shell powder, its alkaline characteristics are used to improve Acid and alkali in water, reducing the degree of acidification of seawater, while raw materials are natural waste sludge to achieve the goal of sustainable environment The attached factory is a reservoir mud that we promote together with local ceramic factories.

2018環境關懷設計競賽 ▶ 佳作

2018 Caring for the Environment Design Competition ▶ Honorable Mention

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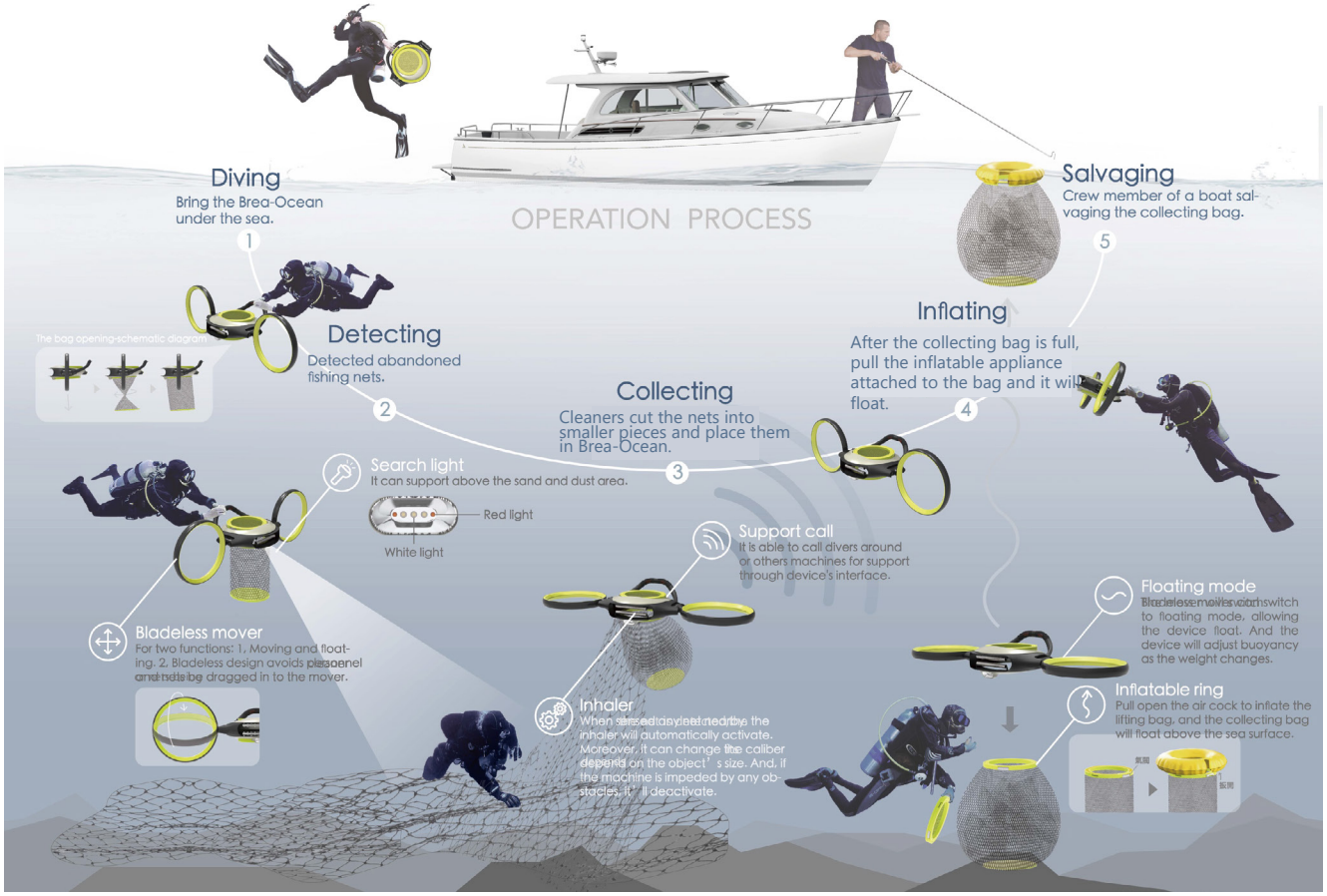
OPERATION PROCESS
Diving
Bring the Brea-Ocean under the sea.
1
Detecting
Detected abandoned fishing nets.
2
Collecting
Cleaners cut the nets into smaller pieces and place them in Brea-Ocean.
3
Inflating
After the collecting bag is full, pull the inflatable appliance attached to the bag and it will float.
4
Salvaging
Crew member of a boat salvaging the collecting bag.
5
Search light
It can support above the sand and dust area.
Red light
White light
Support call
It is able to call divers around or others machines for support through device's interface.
Bladeless mover
For two functions: 1. Moving and floating. 2. Bladeless design avoids personel and nets be dragged in to the mover.
Inhaler
When sensed any net, the inhaler will automatically activate. Moreover, it can change the caliber depend on the object's size. And, if the machine is impeded by any obstacles, it'll deactivate.
Floating mode
Bladeless mover can switch to floating mode, allowing the device float. And the device will adjust buoyancy as the weight changes.
Inflatable ring
Pull open the air cock to inflate the lifting bag, and the collecting bag will float above the sea surface.