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The design and application of the new anti-wave steel fish cage

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The new innovative design of the anti-wave steel cage has the potential to supersede a large variety of currently used wooden cage for fish farming industry in Beihai, Guangxi, China. The key feature of the cage design is its square steel frame, as the use of the large tubular steel not only provides the sufficient buoyancy and structural support, but more importantly the space between two square units can create effective stable walkways for workers. Additionally, the new cage is equipped with a bait casting machine for feeding fish. From 2013 to 2015, we conducted *Trachinotus ovatus* farming experiments by using these new cages. During the test, the growth rate of *Trachinotus ovatus* greatly improved and equipped auto bait casting machines have saved both labor costs and feeding costs in comparison to traditional fish farming methods. In addition, these cages have undergone extreme weather conditions, including the typhoon rammasun in 2014. Typical wooden cages in the same area that were affected during the typhoon crisis suffered from various levels of damages, whereas the new steel cages remained rigid, unharmed and in working condition. This has proved that the advantages of using the new innovative steel cage have outstanding ability to withstand such extreme weather conditions in China's south sea.

Biography

Tao Wang has completed his Bachelor of Landscape Architecture degree from Nanjing Agriculture University, China in 2010. This achievement led him to be able to transfer with two years of course credits to University of Adelaide, Australia in his Bachelor of Architectural Studies. He completed his Bachelor of Architectural degree and Master of Architecture degree from University of Adelaide in 2014. He is the Vice-President of Beihai Fengshun Aquaculture Company in Beihai, Guangxi, China. Currently, he works on "Developing new techniques for fish cages".

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