

□ **Ebb and Flow Table, also known as a "tidal system,"** is a seedling system that simulates the tidal phenomenon by periodically flooding and emptying trays with nutrient solution. In this system, planting containers or seedbeds are periodically filled with nutrient solution, allowing plant roots to absorb the necessary nutrients. Subsequently, the nutrient solution is drained, allowing the roots to breathe air and reducing disease.

□ **Water Conservation and High Nutrient Efficiency**

In an ebb and flow table system, water and nutrients can be reused, significantly reducing water consumption. Compared to traditional irrigation methods, ebb and flow tables not only conserve a significant amount of water but also reduce nutrient loss. Growers can precisely control the composition and pH of the nutrient solution, ensuring crops receive the necessary nutrient combination, thereby improving crop growth efficiency and quality.

□ **Promotes Plant Growth and Disease Control**

When plants grow in an ebb and flow table, their roots experience alternating wet and dry cycles, which not only promotes root growth but also prevents root diseases caused by continuous moisture. Furthermore, the elevated design of the seedbed reduces soil-borne diseases and weeds, further lowering the risk of disease during plant growth.

□ **Convenient Space Utilization and Management**

The three-dimensional design of the ebb and flow seedbed system makes vertical space utilization possible, not only expanding the planting area but also improving the yield per unit area. Simultaneously, the flexibility and accessibility of the ebb and flow seedbed are enhanced by wheels and other mobility devices, greatly facilitating planting management and crop harvesting.

The rapid development of modern agriculture relies not only on scientific and technological innovation but also increasingly on efficient production methods, especially in the seedling stage. The ebb and flow seedbed, a system that simulates the natural tidal phenomenon, has become one of the important technologies for modern agricultural factory-style seedling production due to its high water efficiency and ability to promote uniform plant growth.





