

## VERTICAL INTEGRATED SYSTEM

I would like to present the best alternative in equipment for live holding of shellfish. This vertically integrated system can be completely assembled in just three days anywhere in the United States. This simple and inexpensive concept in live holding for oysters, clams and mussels was developed in Italy and has become very popular in the past years in France, Spain and Italy.

The basic system is made out of the Skim, and specially designed plastic bins for live holding purposes. For working purposes, these bins can be stacked together in columns of up to three bins.

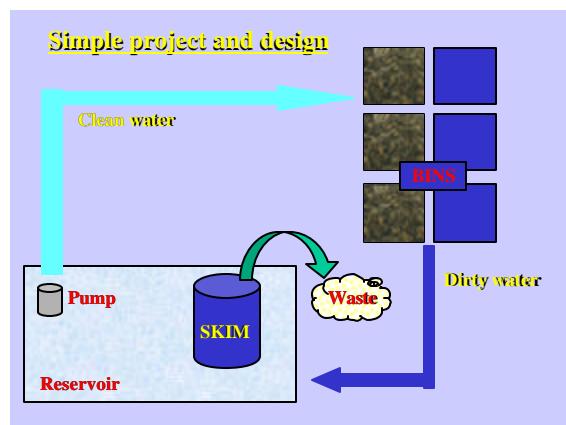


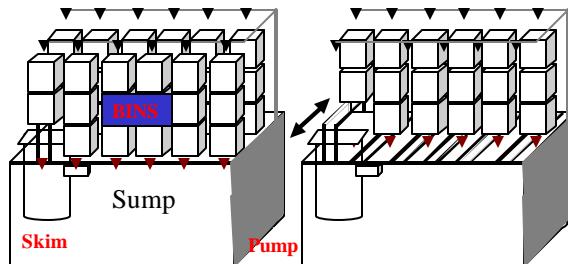
The vertical system is fully integrated and comes in sections of 12 (4 columns of 3), 24 (8 columns of 3), and 36 (12 columns of 3) bins. Each bin has an average capacity of up to 550 lbs of live product so that each section can hold up to 6,600 lbs, 13200 lbs, and 19800 lbs respectively.

The Skim will maintain optimum water quality by removing up to 3% of the total suspended solids and dissolved organic carbon per one complete water exchange in each bin. With a water exchange rate per bin of 15 times per hour, it is possible to remove up to 45% of the total suspended solids and dissolved organic carbons every hour.

It is also capable of removing up to 3 milliards of bacterial units per hour.

The total power consumption is approximately 3.75, 5.25 and 6.25 KW/hour for the 12 bin, 24 bin and 36 bin installation. Power costs on a per pound basis are only 0.000567, 0.000397, and 0.000315 KW/hour respectively for each section.





### Vertical system

This system is extremely flexible in the bin arrangement and the location on the Skim. The following four examples fully illustrate the flexibility of this exceptional live holding system.



Centralized tank (sump) for bins  
and Skim.



Skim in small Tank (sump) together  
with bins



Skim in factory made tank(sump)  
in separate room from bins.



Skim in outside tank (sump) in  
separate location from bins.

The system is fully mechanized reducing overall labor costs and excessive handling of the shellfish. Bins are stacked by the use of a forklift which also is used in delivering the product to the processing line.



With a cost of under \$50,000 for a 12 bin set up, this system is your best choice for live holding purposes. Creel Pump can design a custom made system for your company according to your specific needs.

