

# SMALL-SCALE IN/OUT ECO-LOBSTER CONDO™

Small-scale, self-contained water recycling system for the storage of lobster

## > The state of the art!

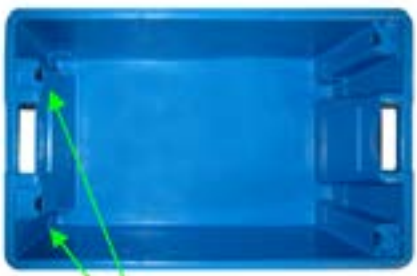
If your goal is to store lobster for only a few days (IN/OUT) in a small footprint, our small-scale Lobster Condo™ could be the solution.

This compact shower system is designed for IN/OUT operation. Sized for product turn over in the range of 525 to 1 050 kg/week (1 155 to 2 310 lb/week) it holds live shellfish in cold flowing water. Chilling and pumping costs are minimised through highly recycled water, and clever two circuit design. It is an extremely reliable and flexible system.



## > State-of-the-art holding configurations

We've selected these totes for their convenient moulded-in overflows that keep the animals submerged as water flows swiftly from one tote to the next below through calibrated holes and built-in stand pipes.



Built-in stand pipes

### Storage capacity

	Fish totes	
Kg lobster/blue tote	25 kg	55 lb
Number of lobster tote/stack	3	-
Number of lobster stacks	7	-
Volume of water/tote	87 L	23 gal
Peak holding capacity	525 kg	1 160 lb

## > A water treatment system that ensures well balanced water quality

Upon arrival, lobsters release more ammonia and solids. Furthermore, oxygen consumption and carbon dioxide production are both significantly increased. The recycling filtration loop provides generous filtration capacity with a convenient oversized filter for solid removal. The efficient degassing column replenishes oxygen and expels carbon dioxide.



## > Outstanding live biofilter

In this lobster condo, ammonia is controlled through our AquaNit trickling biofilter. Needs for water replacement is therefore very little ( $\leq 5\%$  water volume per day).

Our Lobster condo features additional protection against ammonia peaks: the biofilter is coated with active ammonia feeding bacteria (nitrifying) before delivery. This exclusive Aquabiotech feature significantly dampers ammonia peaks, adding reliability to your system.

Note that rapidly filling a closed system with non-purged lobster normally results in soaring ammonia levels especially when first started. When first starting the system, simply follow our easy steps to re-activate the biofilter nitrifying population, and then add lobster gradually over a week or two.

## > Water chilling installation

To achieve target temperature of  $8^{\circ}\text{C}$  ( $46^{\circ}\text{F}$ ), which is significantly below ambient in summer, the housing section of the unit should be located in an air-conditioned room. Alternatively, insulated panels can be added to enclose the housing section.<sup>1</sup>

Handles on the insulated panels make them easy to remove and put back into place to access individual totes. The chiller can be added as an option. Two models are offered depending on the desired water temperature. These are quiet units associated with a titanium heat exchanger.



<sup>1</sup> The unit's air-cooled chiller, pre installed on its own pallet, must be located in a separate, well ventilated area

## > Flexible system for longer term storage

By simply adding trays, the unit can keep lobsters protected for longer storage periods. The trays are developed to meet longer-term holding requirements, keeping the animals separated and allowing a constant water flow.



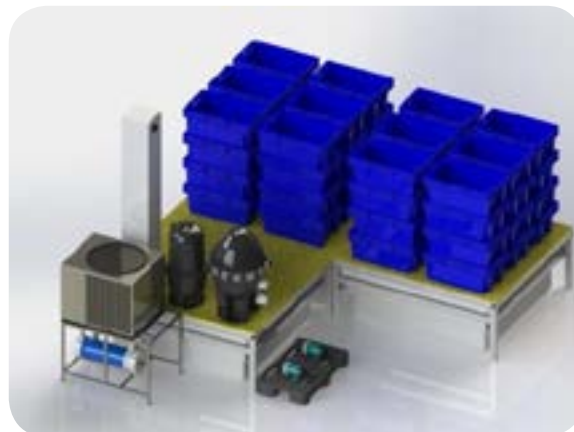
## > Save on installation costs and start-up time

This completely self-contained unit is to be set on a concrete floor with a drain. The water recycling with biofiltration module being on plastic pallets is simple and straight forward to install by a layperson. To commission the Lobster Condo, an electrician is required to connect the pump starters (120/220V 60Hz or 50Hz) and refrigeration technician to connect the remote chilling system to the unit. The system should be linked to a fresh seawater line for seawater makeup.

### Electrical requirements for the 500 kg Eco-Lobster Condo™.

Apparatus	Amp	Volts	Ph	Hz	Certification*
Habitat pump	1.8	230 V	1	50	CSA; CE
Filtration pump	3.2	230 V	1	50	CSA; CE
Air Blower	3.0	230 V	1	50	UL; CE
Bead filter Blower	6.8	120 V	1	50	RU

Note: We provide equipment rated for 60 Hz as well



Capacity: 1200 kg (2640 lb)

## Low maintenance units - suggested schedule

### > INITIALLY:

The biofilter comes pre-coated with active seawater nitrifying bacteria at Aquabiotech's factory. This unique feature prevents ammonia from accumulating for months as in most other systems, protecting the lobster right from the start.

Upon system arrival, simply add our biofilter nutrient mix to the water following the instructions. This will re-activate the biofilter. Then add lobster gradually to your system until the peak load is achieved. This gradual filling should be completed within a week or two.

### > DAILY:

Water flow check: a good habit. It also tells when to backwash.

### > WEEKLY:

Check dissolved oxygen (DO), pH, ammonia: you'll get to know how your system reacts to your daily input/output of lobster. Adds peace of mind. Filter backwash. Done in 10-15 min. Very little water is needed. More frequent backwashes may be required at higher product turnover. Check water level in fresh seawater storage sump and fill if needed.

### > MONTHLY:

Check salinity, nitrite, nitrate, glycol level

### > YEARLY:

Check level of pH buffer stones

Check and clean system.

## Optional chillers

HP	Cooling Capacity (kW)	Energy (kW)	*Temp. reached (°C)	Operational Time (%)
0.5	2.56	0.9	8	89
2.0	5.80	2.0	3	42

\*Tests made with insulated panels

- > Unit foot print: 180.9 cm x 330.0 cm x 218.4 cm (70.8" x 129.9" x 86")
- > Unit with fish totes cost: USD \$17 000, without the chiller, add \$3 000 for insulated panels
- > Price ranges from 34 to 38\$/kg, for up to 2400 kg (15.45\$/lb, up to 17.27\$/lb)
- > An Installation Manual guides the operator for setting up the unit in a few hours (on-site training & commissioning is available in option)
- > Many options are available.
- > Call us toll free at 888-933-0303 (Canada and USA only) or 819-849-4440 for a complete quote!