

# Wheely Complete

Advanced Bio Processing Technology by Sustainable Aquatics

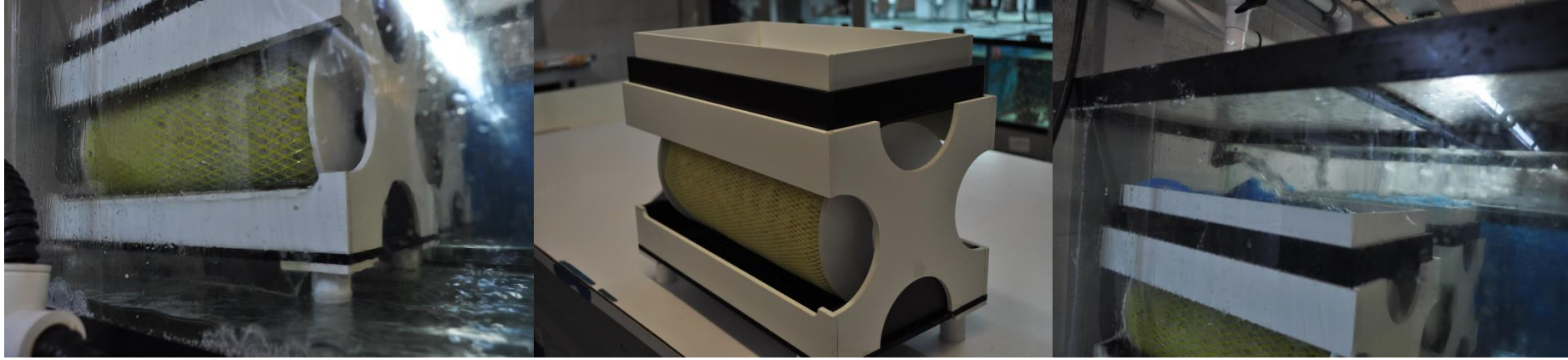


## Benefits of Wheely Complete:

- Hosts very large cultures of aerobic bacteria, eliminates ammonia and nitrites
- Scrubs CO<sub>2</sub> from Water with very high rates water air mixing
- Oxygenates Water
- Superior to Bio balls in Nitrogen Cycle Process
- Effective in Koi, fresh and salt water systems

# Wheely Complete Pro C

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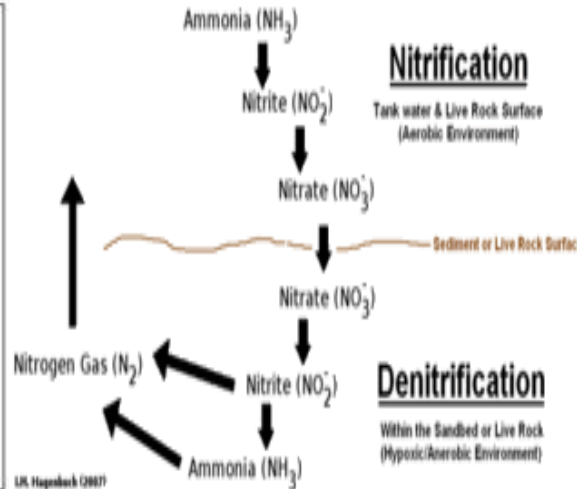
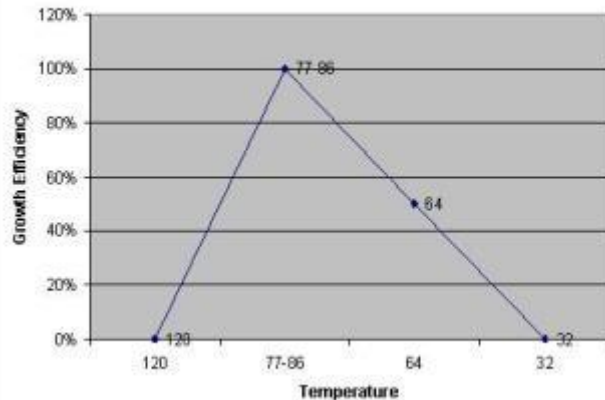
## Wheely Complete Pro C Installation Options:

- In Sump (Six units in Sump on previous slide)
- Over Sump
- In 15 gallon tank over system (Shown here)
- With flat filter pad on top tray (Shown here)

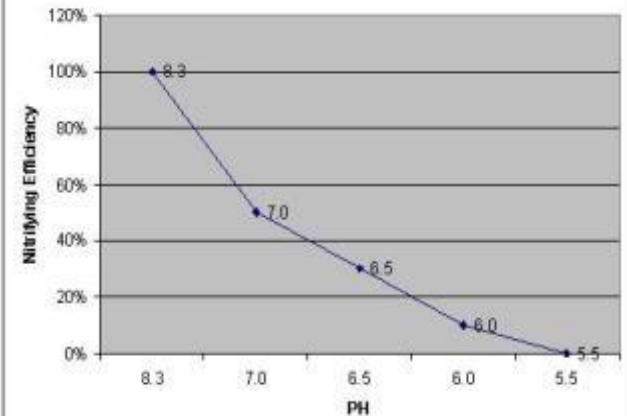
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Effects of Temperature on Nitrifying Bacteria Growth



Affect of pH on Nitrifying Bacteria Efficiency



## Optimal Conditions:

- Temperature 78 F, pH 8.3
- Cycle Starts with Nitrosomanas, processes  $\text{NH}_3$
- When  $\text{NH}_3$  is reduced Nitrobacter amplifies and processes  $\text{NO}_2$  into  $\text{NO}_3$  (nitrites to nitrates)



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## Wheely Complete Pro C Operating Processes:

- **Processes ammonia (NH<sub>3</sub>) into nitrites (NO<sub>2</sub>):** Wheely Complete Pro nurtures very large healthy populations of aerobic autotrophic nitrosomonas bacteria, which very efficiently process NH<sub>3</sub> into NO<sub>2</sub>. This is the 1st step in cycling and leads to the 2nd step: as ammonia levels fall nitrobacter bacteria begin thriving;
- **Processes nitrites into nitrates (NO<sub>3</sub>):** Once the ammonia levels have settled down, the 2nd step in cycling happens: aerobic autotrophic nitrobacter bacteria are able to grow, processing nitrites into nitrates. Nitrates, unlike ammonia and nitrites, are not so toxic to fish. A NO<sub>2</sub> spike often happens as this begins.
- **Scrubs carbon dioxide (CO<sub>2</sub>) from the water:** Wheely Complete Pro efficiently removes CO<sub>2</sub> from the water, which aids the fish and helps control pH;
- **Oxygenating:** Large quantities of oxygen are required for healthy fish and for strong healthful bacteria cultures; Wheely Complete Pro C pulls O<sub>2</sub> from the air, so bacteria do not compete with the fish for oxygen and high O<sub>2</sub> levels are maintained





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## Wheely Complete Pro C Advantages:

- **Extremely Compact and space efficient**
- **Enables variable bio loads in retail stores, stocking, sales and restocking with undetectable changes in ammonia and nitrites**
- **Especially effective on fresh water tanks where Protein Skimmers cannot be used to remove waste before entering the nitrogen cycle**
- **Low maintenance;**
- **Very effective for fish systems in maintenance accounts;**
- **Economical.**



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## Wheely Complete Pro C Dimensions and Installation:

- Length: 15 inches, or 38 cm
- Width: 8.5 inches, or 21.6 cm
- Height: 11.75 inches, or 29.85 cm
  
- Maximum water depth in which it can stand without legs: (So water will flow out and not flood the wheel) 3.6 inches, or 9.1 cm
  
- If water is deeper than 3.6 inches (9.1 cm) add PVC legs, included, thus lengthening leg equal to water depth minus 3.6 inches (9.1 cm)