

Calculating The Volume of Nutrient Solution in a Tank

Formula = $\pi r^2 \times \text{Depth}$

π = Pi (3.142)

r^2 = Radius of the Tank Squared

Depth = Depth of the Nutrient Solution in Tank

To Measure the Radius of a Tank (Squared):

Take a tape measure and measure from the very left hand side of the tank across the top of the tank in a straight line to the very right hand side of the tank. This gives you the diameter of the tank. E.g 2.2 metres. To convert this into the Radius of the tank, divide the Diameter by two.

E.g 2.2 metres Diameter / 2 = 1.1 metre Radius

To Square this figure you multiply the radius by itself:

E.g 1.1m x 1.1m = **1.21 metres (r^2)**

To Measure the Depth of a Tank:

Turn off the pump and allow the nutrient solution from the hydroponic system to flow back to the tank. Put a pole into the tank until it touches the bottom. Pull the pole out of the tank and measure from the bottom of the pole to the water mark on the pole.

E.g **1.6 metres (Depth)**

To Measure the Volume of Solution in the Tank:

$\pi r^2 \times \text{Depth}$

= 3.142 x 1.2 metres x 1.6 metres = 6.032m³

Therefore there is 6032 Litres of Nutrient Solution in the tank.

