How to build a Multiple scuba tank rack

Rack up your tanks!

Got more than one tank? Then you need a multiple tank rack, still a cheap & easy DIY project

Designed around 12L steel tanks; they also restrain 10L & 15L tanks.

This tutorial shows how to make a "2 scuba tank rack" and a "5 scuba tank rack".   Customise this design to hold as many tanks as you need

2 scuba tank rack

The Pool Noodle

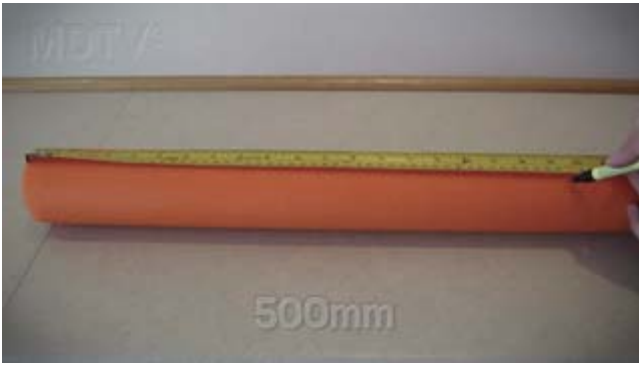Grab yourself a standard Pool Noodle (approx 70mm diameter).

available from most department stores (Big W, Kmart, BCF, sporting stores and pool shops)

From a single Pool Noodle you can construct a "2 scuba tank rack" or from 2 Pool Noodles a "5 scuba tank rack".

1500mm divided into 3 sections = 500mm

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Mark out the cut points 500mm long for the 3 sections along the Pool Noodle

Cut the pool noodle twice on the markings, you can use an electric carving knife, razor blade or a hot wire.

Mark out the positions of the holes, 100mm in from each end on all sections

To make sure the holes are in the same line you can place the sections against a wall and measure out the same distance from the wall.

I'm using approx 8mm rope.

you can use any size rope you have available

Use a drill bigger than the rope diameter; I'm using an 8.5mm drill.

Drill a hole through both ends of all Pool Noodle sections

Drill the holes through the Pool Noodle as straight as possible, so that when they break through on the other side they will be in the same line.

The Rope

For a "2 scuba tank rack" cut a length of rope 2000mm long

any excess will be cut off later

Fold the rope in half and mark the center of the rope with tape

Push the rope through the hole in one end of the 1st section of the Pool Noodle

to make it easier to push the rope through the holes tape the end tight

Pull the rope through until the center marker appears

Push the rope through the remaining hole in the Pool Noodle you have just threaded, centering the tape in the middle of the Pool Noodle.

Continue pushing the rope through a 2nd section of the Pool Noodle as shown

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Loop the rope back around the middle Pool Noodle

And use tape to stick the end of the rope to the section of rope that already goes through the hole

Pull the end of the rope through the hole and untie the tape

Pull the remainder of the rope through the hole.

Position the Pool Noodles so that they are approx 120mm apart

when the tank rack is complete and the rope is bedded in, the gap will be approx 130mm wide

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Thread the other side of the rope through the remaining hole

Loop the rope back around the middle Pool Noodle and tape it to the rope that already goes through the hole

Pull the end of the rope through the hole and untie the tape

Position the Pool Noodles so that they are approx 120mm apart

recheck both sides to ensure they are both even

Continue pushing the rope through a 3rd section of the Pool Noodle as shown

repeat the process on the other side

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Position the Pool Noodles so that they are approx 120mm apart

Bend the ropes at right angles where they exit the Pool Noodle, this will show you where the 2 ropes will meet & overlap.

If the ends of the rope are melted together, you will need to cut the strands loose on both ends

Untwist a section of each rope, back to the point where the ropes met (as determined 2 steps ago)

Push the ropes together so that the strands on the right alternate between the strands on the left.

imagine the 3 strands form a triangle, have one rope with the triangle pointing up and the other pointing down

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Hold one side of the strands and the rope together and tape off the other side of rope and strands

push the Pool Noodle back to give you more room to splice the rope

Take one of the free strands and place it over the adjacent restricted strand and under the next restricted strand, repeat this process for all free strands.

Check YouTube for more detailed information on splicing
www.youtube.com/watch?v=bPaayLAS-IA

Check your progress, there should be a free strand coming out between every restricted strand

Continue the splicing process until you run out of free strands

Remove the tape holding the other side and repeat the splicing process

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Roll the spliced rope between your hands a few times to fully seat it into position.

Cut the excess off with a hot knife or heated blade for best results.

you can just cut the strands off and melt the ends using a match if you do not have a hot knife

Pull the first & last sections of the Pool Noodle out to the extremities of the rope and you have finished making your multiple scuba tank rack.

on the next page you can find out how to make a "5 scuba tank rack"

**The video tutorial for this project is available on my YouTube site
www.youtube.com/mdtv3**

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5 scuba tank rack

Follow the instructions above except as these differences shown below.

To make a 5 scuba tank rack you will need 2 Pool Noodles.

For a "5 scuba tank rack" cut a length of rope 4000mm long

Loop the rope around and through each of the Pool Noodle sections (except the first & last sections)

Set all the Pool Noodle sections 130mm apart (except on the first & last sections, which are 120mm apart)

You can alter this design to hold however many scuba tanks you like.