

How to make wooden olympic rings

Ingredients and tools:

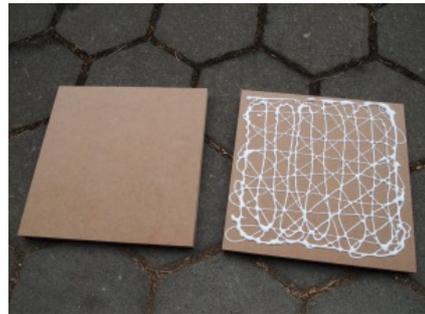
- 4 25 x 25cm 18mm thick plywood or very strong chipboard
- Wood glue, a compass, a saw and a drill with a wide wood bit (16mm or more)
- Sanding devices of choice, some paint (optional)

Time and cost:

wood - 3 pounds, glue and paint - 2 pounds. Time used (in my case) was a couple of hours.

Steps:

1. Get some wood as described above and glue two and two pieces together. The Olympic rings should be 28mm thick (toroid inner radius), so you can work from 36mm wood and sand it down to a nice shape. You want the wood to be quite strong, so use either plywood or get a strong variety of chipboard. The glue line will come in the center of the finished rings, so it won't really affect the final strength. If you can get a single piece of wood that is 36mm thick, you can use that instead of gluing the pieces together.
2. After gluing, draw the profile of the rings on one side of the wood. You can find the center of the square by drawing diagonals. The inner radius of the rings should be 90mm and the rings should be 28mm wide (so an outer radius is 118mm). If you can fit a marker in your compass, do so. If not, just put a line over the compass markings using your hand. Remember: measure thrice, draw once! Even though the circles are now 28mm wide, and the sides are 36mm, you needn't worry. Sanding it all down will make it right. It can also be useful to make a compass line at 104mm (right between the two marker lines). This line can help when sanding, but is not necessary.
3. Next step: cutting. This should be pretty straightforward. Use any kind of saw you have, just make sure it is powerful enough, since you are cutting a strong piece of wood. To cut the inner circle, it helps to first drill a hole with a drill and a wood bit inside of the inner circle (see image) and then saw from there. You don't need to cut perfectly at this moment, just make sure you are outside of the lines.
4. After you've cut both pieces, you can start sanding. This step can be either very easy or very difficult, depending on what kind of tools you have. I used a two step process for rough and fine sanding. You can use a variety of tools here (belts, papers, hand-held sanders, flex machines, drills with sanding bits etc.). Take your time since this defines your final product. Make sure that you don't "oversand"! If you do that, there is no turning back. If you want to make sure, take a caliper and check that the width never goes below 28mm (which should be the final width).



5. Optional step - you can decide to protect and/or personalize your rings with some paint. My wife put a layer of thin protection and then painted the rings red to match the boxing bag. Attach some straps and start exercising!

