

# Hurrah !

You'll now be able to create seamless rings in a breeze !

No more paste, no more filling, no crack that open during firing, no stress !

I hope your Ring Maker™ set will give you full satisfaction.

Actually, I'm pretty sure it will ;-)

Thanks for your trust !

Clément Marquaire - CMMC TOOLS

## A brief reminder of the most important elements concerning your Ring Maker<sup>™</sup>:

• If you use heating elements to dry you ring, such as a hot plate or a dehydrator, **the temperature must never exceed 47°Celsius**, otherwise your Ring Maker<sup>™</sup> will be damaged.

• The sizes shown on the Ring Maker<sup>™</sup> are the sizes before drying and firing, not the final sizes of a fired ring. You will need to consider the shrinkage percentage for each metal clay.

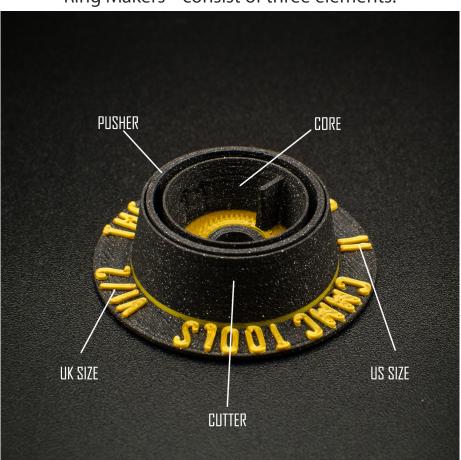
• The ring must be removed from the Ring Maker<sup>™</sup> BEFORE it is completely dry. Otherwise, cracks may appear on the ring, it will be very difficult to remove and the Ring Maker<sup>™</sup> may even be damaged. All the details on the timing and the optimal drying time will be detailed below.

• These instructions may sometimes seem very precise and technical, and give the impression that the use of the Ring Maker<sup>™</sup> is complex, but rest assured, it is not! I'd rather just give you all the details and the best ways to use them now, which can be a lot of information, but in practice **it's very, very simple.** 

This guide is complete but a video is sometimes more telling, **so I advise you to watch the presen-tation video on the The Ring Maker™**, by following this link: The Ring Maker™ Youtube TuTorial

You can also access the video by scanning this QR Code:

### Now let's see how to create a ring with the Ring Maker<sup>™</sup>! Let's start with the basics:



Ring Makers<sup>™</sup> consist of three elements:

• The inner part, or Core, is what gives the ring its size. It is removable.

• The external part, or Cutter, is the one that gives the thickness of your ring.

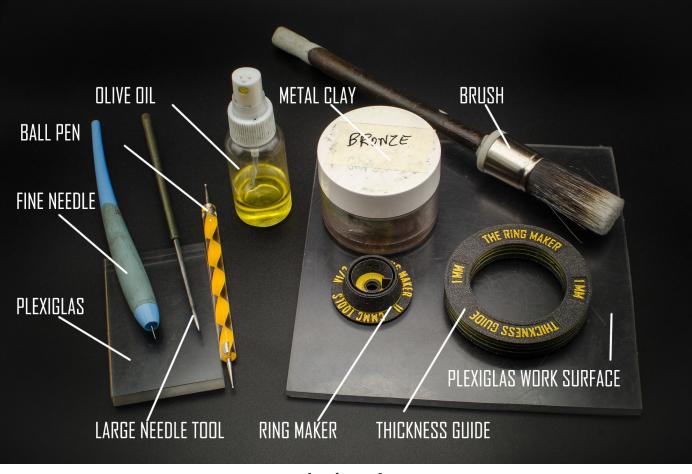
• The moving part in the Cutter is called Pusher, and will allow you to push the ring out of the Ring Maker<sup>™</sup>, after drying.

I will explain the details of the possibility of choosing the thickness of your ring in **part 2** of this guide.



# Here are the most common and useful tools you will need:

- a non-adherent work surface, such as Teflon, tiles, Plexiglas, etc...
- a roller to roll the clay
- thickness guides, such as playing cards, plastic strips or frames, or, The optional Ring Maker<sup>™</sup> Thickness guides
- a clay pick wide enough to remove the excess clay that remains in the core
- olive oil or any other element preventing the clay from sticking to the Ring Maker™
- a brush to apply the oil
- a small plate of Plexiglas, acrylic or other, to press the clay (optional but practical)

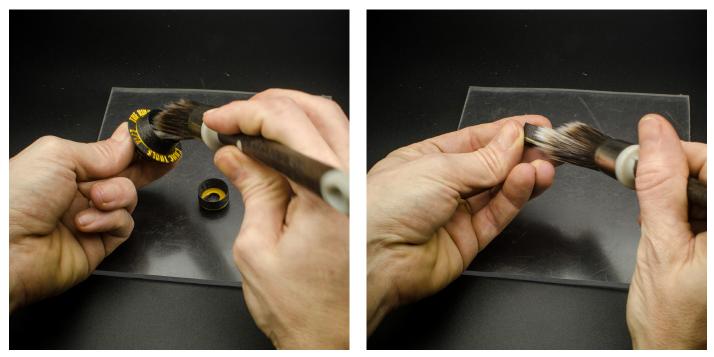


Let's go!

# • First, apply oil to the Ring Maker<sup>™</sup> and your work surface.

Even if this new version of the Ring Maker<sup>™</sup> is very smooth and fine, and we could do without it, it is always better to apply oil or any other anti-adherent, so that the clay does not not adhere too much to the tool. This guarantees a perfect result and makes cleaning incredibly easy or even unnecessary

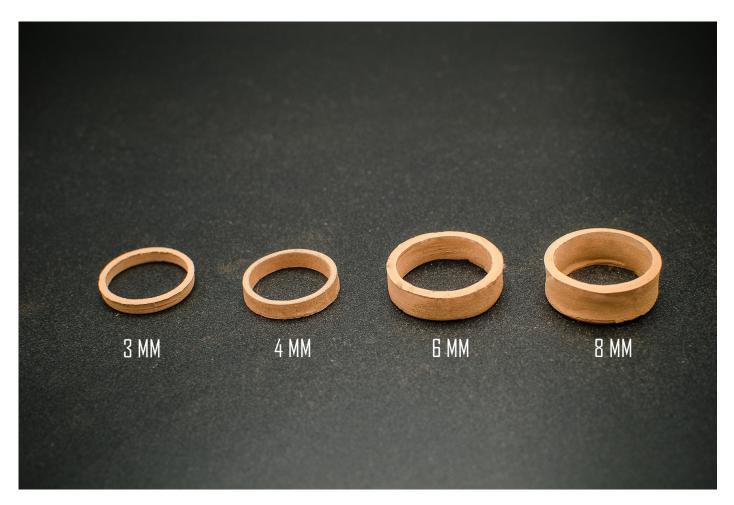
Personally I use olive oil.



Using the brush, apply oil all over the inside of the Ring Maker<sup>™</sup>, making sure to get it all over.

# • You will then roll your clay to the desired thickness.

This thickness will determine the width of your ring. **The maximum is 10mm.** There is no minimum but I would advise you not to go below 1mm or even 1.5mm, because the ring would be very thin and fragile.



For your first ring, I suggest you try a ring between 2 and 5 mm wide.

Also, remember that this width is that of the ring with fresh clay. After drying, retouching and firing, it will be narrower.

Say you want to make a ring that when fired will be 4mm wide.

# • Roll out your clay to 5mm thickness.

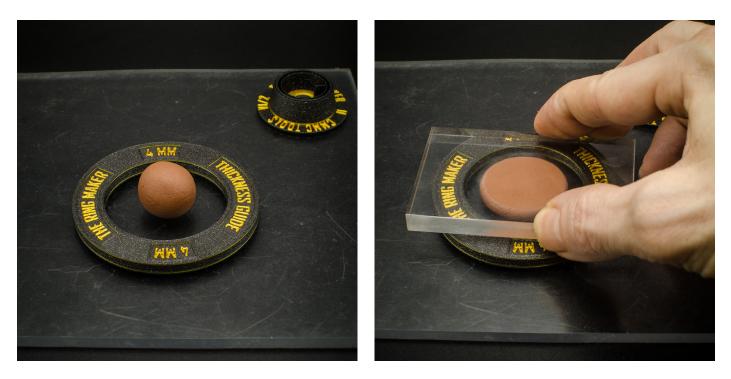
The extra millimeter will allow you to sand the ring when it is dry, and takes into account shrinkage during firing.

Depending on the degree of sanding and touch-up before firing, as well as the type of clay used, your final ring will be between 3.5 and 4.5 mm wide.

Tip: form a ball of clay and press it between your thickness guides, using a piece of acrylic, plexiglass, or tile for example.

In this way, the clay will spread out in a circular shape.

Then, use your roller to flatten it to exactly the thickness you want.

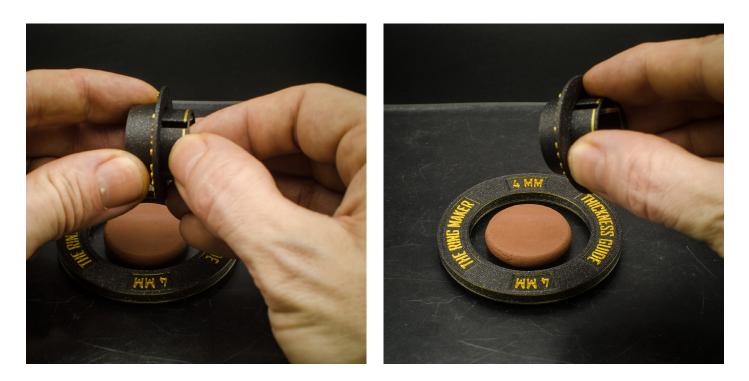


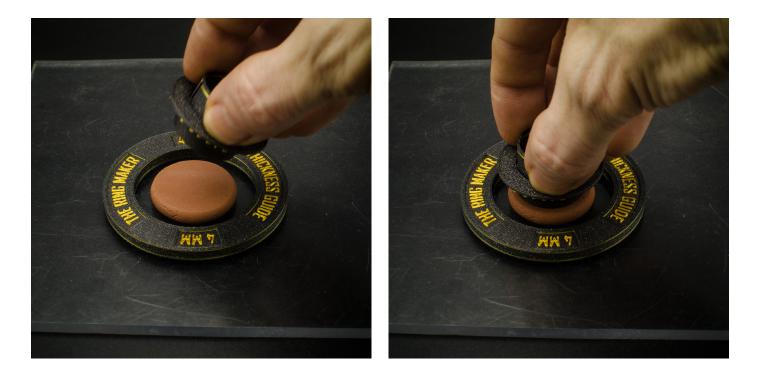
## • Press your Ring Maker<sup>™</sup> into the clay.

Take your Ring Maker<sup>™</sup> and pull out the Pusher. Hold your Ring Maker<sup>™</sup> by the pusher and press it into the clay, trying to press as straight as possible, rather slowly and with even force.

*The Pusher is quite delicate* so do not overtighten your fingers to avoid damaging it. It is just a matter of retaining it but the pressure in the clay is exerted on the base of the Cutter.

Once the Ring Maker<sup>™</sup> has been stopped by your work surface, the ring is cut. No need to exert more pressure.





# • Remove the Ring Maker<sup>™</sup> from the clay, and using a clay pick, remove the excess clay that remains in the Core.

*NB:* When the ring is at least 2 mm thick, the clay remains stuck in the Ring Maker<sup>™</sup> when it is removed.

With a thinner ring, clay may stick to the work surface rather than the Ring Maker<sup>M</sup>. In this situation it is preferable to slide the Ring Maker<sup>M</sup> to the edge of the work surface rather than lifting it.



### • Put the Ring Maker to dry.

Turn the Ring Maker<sup>™</sup> over, and lay it with the inscriptions down to let the ring dry. this will prevent the Pusher from exerting pressure on the clay and leaving a trace.

CAUTION: It is essential to dry the ring sufficiently before extracting it, but not entirely, otherwise it risks breaking and/or getting stuck in the Ring Maker<sup>™</sup>.



Not dry enough before extraction and the Pusher risks leaving a mark in the clay and deforming the ring.

Care must therefore be taken to extract the ring only within the window of optimal drying time.

There are two ways to dry the ring: in the open air, or in a dehydrator set to a **maximum of 47°C**.

You can use a hot plate or a mug warmer but you must be sure that the temperature does not exceed 47°C, otherwise your Ring Maker<sup>™</sup> will be damaged. Be careful, sometimes the ambient air is at the right temperature but the heating plate itself greatly exceeds 47°C.

In both cases, before extracting the ring, the visible surface of the ring must be dry to the touch. You can use a ballpoint pen, the tip of a pen, or something similar, to lightly press down on the clay. It shouldn't leave a mark.

If the ball leaves a mark in the clay, it is not dry enough.

Here is an estimate of the minimum and maximum drying times before extraction of a medium-sized ring (thickness between 1.5 and 2.5 mm, and width between 3 and 6 mm).

#### NB: Larger rings must be dried longer.

| Drying Method                             | Minimum drying time | Optimal drying time | Maximum drying time |
|---|---------------------|---------------------|---------------------|
| Open air. 20°C                            | 2h                  | 3h                  | 4h                  |
| In a dehydrator. 47°C                     | 1h                  | 1h20                | 2h                  |
| XL Ring / 47°C<br>4 mm thick<br>8mm withd | 1h30                | 2h                  | 4h                  |

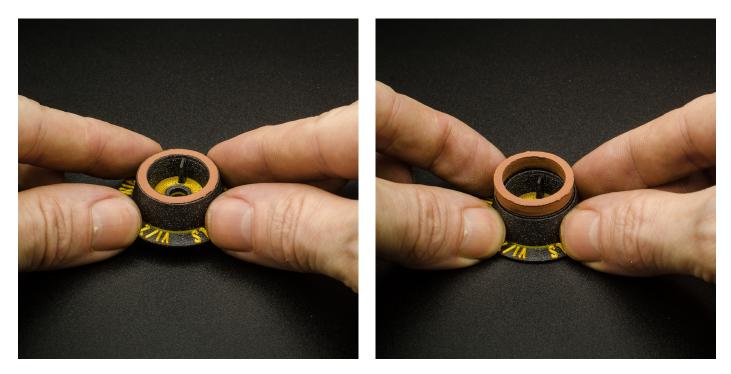
Note that the type of clay used, as well as the width and thickness of the ring can affect these times. These are a starting point, it's up to you to experiment later with your favorite clay.

The easiest way is to set an alarm to remind you of the optimal time to extract.

# • Pop the ring out of the Ring Maker<sup>™</sup>.

Lay the Ring Maker<sup>™</sup> on your table with the markings facing up.

Press down on the base of the outer cutter with your thumbs and index fingers of both hands. Make a downward movement.



Tadaaa!

Your ring is out of the Ring Maker<sup>™</sup>.

### But don't touch it yet !

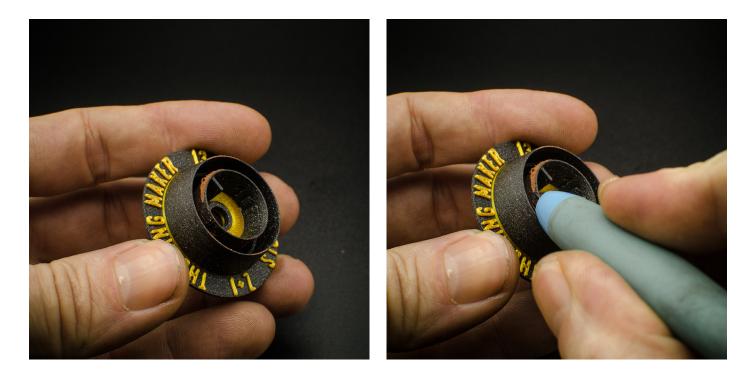
If the edges are dry enough for the ring to come out, the rest of the ring is not yet dry. By touching it or taking it in your fingers you risk deforming it.

Simply leave the ring on the Ring Maker<sup>™</sup> and let it dry there.

After 30 min at 47°C or 1 hour at 20°C, the ring will be dry enough to handle. You can then put it in a dehydrator or on a hot plate or let it air dry.

# • Cleaning the Ring Maker<sup>™</sup>.

If residues of clay remain in the Ring Maker<sup>™</sup>, **the easiest way is to wait for them to dry** and then remove them with a very fine needle. Generally by passing the tip of the needle under the layer of dried clay, the whole layer leaves at once.



But if you've oiled it well and waited long enough before popping the ring out, there shouldn't be anything to clean.

If necessary, you can also clean the Ring Maker<sup>™</sup> with lukewarm water (not too hot!)

Now that your ring is dry, all you have to do is the finishing before firing.

You can stick a texture on it, add a setting with a stone, or give it a special shape by carving into it or sanding it, the possibilities are endless.

You can also make hammered textures by hammering the ring on a steel mandrel after firing. As the ring is seamless, it is very, very solid. Remember to make it smaller than the final size you want because hammering it will enlarge it.

You can follow me on instagram, facebook and youtube, I will post tutorials soon.

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 $\Delta$  Facebook : @geometricallyStuck

 $\Delta$  WEBSITE : www.geometricallystuck.com

# 2. Vary the thickness of the rings

You can, by interchanging the Cutters and the Cores, choose the thickness of the ring.

Let me explain :

Basically, each Core and its Cutter make a ring with a thickness of 2.5 mm.

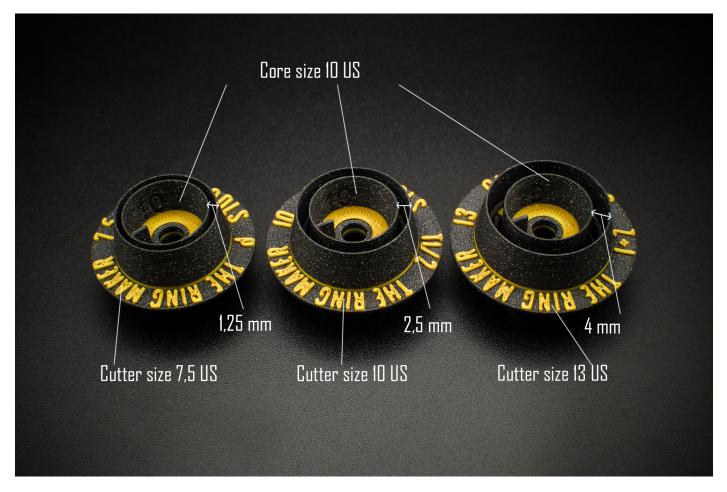
So a Core, for example, size 10 US, in its Cutter 10 US, will give an (unfired) ring of size 10 US and a

thickness of 2.5mm.

If we put a smaller Cutter, it will make a thiner ring. Bigger, and the ring will be thicker.

For example, a Core Size 10 US in a Cutter 7.5 US, will give a ring (unfired) of size 10 US and a thickness of 1.25 mm.

A Core Size 10 US in a Cutter 13 US, will give a ring (unfired) of size 10 US and a thickness of 4 mm.



Each half size adds or subtracts 0.25mm.

Sorry if this all sounds like a problem to be solved in a math book ;-)

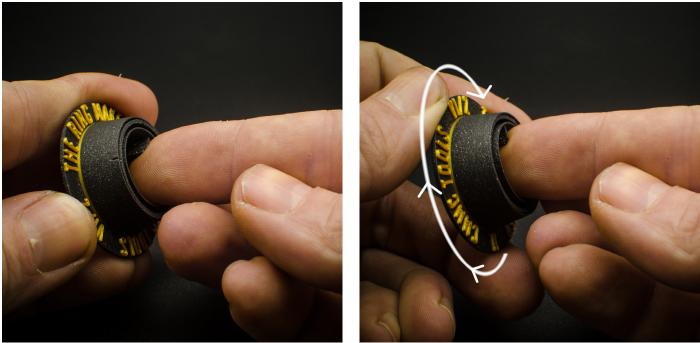
The thinnest thickness you can create using these combinations is 1.25mm. The widest one has (really) no limit.

The Cores are attached to the Outer Cutter by screwing.

To remove them, unscrew them by turning counter-clockwise. The easiest way is to hold the Cutter Base in your left hand, vertically, place your right index finger in the Core, against the tab, and with your left hand, rotate the outer cutter outward.

To put them on, screw them in by turning them clockwise.

This should be done easily, without force and without blocking. Do not force it, otherwise the thread might be damaged.



Take off the core by turning the base away from you.

If you feel any difficulty screwing, it is because the Core is not well aligned with the thread of the External Cutter. Remove it and start over.

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Well, I hope these explanations will be useful to you and were not too long.

You will see after trying that the use of Ring Maker<sup>™</sup> is really very easy.

Several other shapes of Ring Maker<sup>™</sup> will soon be available, along with innovative new CMMC Tools.

Can't wait to see your creations!

Clément

