



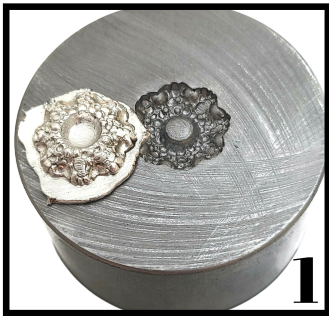
Sea Star Impression Die

by Annie Pennington

Learn 2 ways to set a stone in the Sea Star Impression Die from the June 2021 Subscription Potter Box, "Under the Sea."



Option 1: Modified Flush/Prong Setting



1. Use a torch to melt fine silver into a ball in a crucible, on a charcoal block, or pour a small ingot. The ingot should be approx. 3/16"-1/4" thick and approx. 1/2" diameter. Place the silver onto the sea star impression die, and center the die in your press. Press the fine silver into the impression die. If you don't get all the detail after the first press, trim the excess silver from around the impression, anneal, and press again until you achieve the desired result.
2. Use a jeweler's saw to trim excess silver from around the final impression. Use a snap-on sanding disk with a rotary tool to remove saw marks from the edges of the impression and refine the shape.
3. Use a scribe to make a divot in the center of the silver impression. Drill a hole through the silver at the mark. Start with a small hole, and then use progressively larger bits until you drill a 2-3mm hole.
4. Use a 5.5-6mm ball bur to remove metal for the setting for a 6mm faceted stone. Then, use a 5.5-6mm 90° setting bur to cut a seat for the stone. Make a small cut, turn the piece a quarter turn, and make another small cut.



5. Test the fit of the stone regularly -- it's easy to remove more metal, but not so easy to fix a too-large hole! The table of the stone should be even with or slightly below the edges of the impression when viewed from the side. Adjust the seat as necessary to ensure the stone is level.
6. Complete any soldering and fabrication needed to complete the piece. In this example, a simple ring was soldered to the setting to make a pendant. Be sure to remove any burrs from around the hole on the back of the pendant.
7. Apply a liver of sulfur patina to the silver.
8. Use pumice powder or other abrasive to remove the patina from the high points and highlight the textures.
9. Use a non-abrasive polishing cloth or felt buff to remove the bulk of the patina from the stone setting.
10. Place your stone into the setting and adjust the seat as needed. Use a hammer handpiece with a narrow cross-peen tip to begin to set the stone. Place the cross-peen tip between the bumps on the impression die, and slowly push the metal over the girdle of the stone. Work from opposite sides of the stone until you can no longer remove the stone from the setting. These areas of metal between the bumps will serve as "prongs" to hold the stone in place.
11. If desired, use a hammer handpiece with a rounded bullet-shaped tip to blend marks left by the cross-peen tip into the silver and add texture.
12. Repeat with both tips until the desired finish is achieved, and touch up the silver with abrasives, if needed.

Option 2: Tube Setting

Another option for setting a stone in the impression is to create a tube setting. This is a brief description of the process of creating the setting, but does not include detailed instructions for how to set the stone.

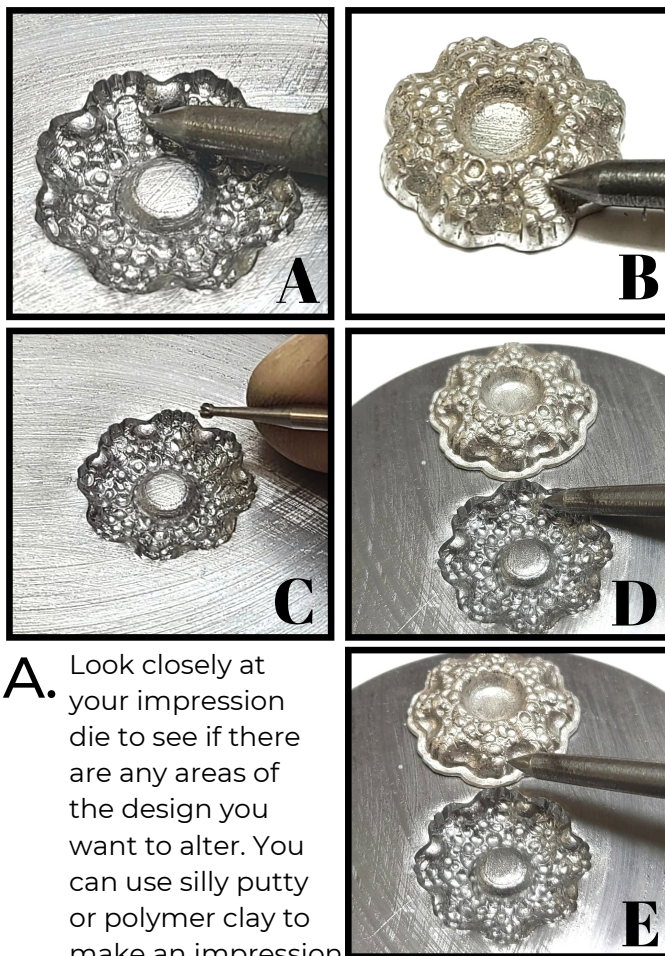


1. Drill a small hole in the center of the impression. Use progressively larger drill bits and/or ball burs to enlarge the hole to the exact same size as the OD of the tubing. The tubing should fit snugly in the hole.
2. Use a ball bur and setting bur to create a seat for the faceted stone in one end of the tubing.
3. Insert the tubing into the hole in the impression, and use a jeweler's saw to trim the tubing to length. The tube should extend above the top of the impression approx. 1/16" to make it easier to set the stone with a setting punch. Solder the tubing into the hole.
4. File the back of the tubing flush with the impression, and use the jeweler's saw to refine the edges of the impression. Complete any fabrication steps and apply a patina before setting the stone. I used a concave setting punch, but you can use a bezel pusher or hammer handpiece.



Modifying the Impression Die

Sometimes, when we make a working hub from an original to ensure the original art doesn't get destroyed, a little bit of detail is lost. Luckily, it's easy to alter the die you receive! This is absolutely not necessary, but if you want to add/change/remove any bumps from the die, here's how to do it!



- A. Look closely at your impression die to see if there are any areas of the design you want to alter. You can use silly putty or polymer clay to make an impression so you can better see the details. This photo shows an area I wanted to address.
- B. Here is a silver stamping showing the same point as the previous image. I wanted to add a bump at this spot to better tie in to the rest of the texture.
- C. Use a tiny ball burr to create a divot in the impression die -- this will create a raised bump in your pressed metal.
- D. This is the same spot in the die that has now been altered.
- E. This is silver pressed into the altered die.