

beginner
metal clay



The Silver Goddess

*Indulge your creativity with
a personalized metal clay pendant*

by Louise Duhamel

Whether a fantastical being or real woman, the goddess theme has been appearing everywhere — in jewelry, artwork, and, fashion. To express your personal idea of a goddess in metal clay, think along thematic lines. Cultural traditions, the natural world, time periods, or fashion trends are all areas to explore. Let yourself go, and see where your imagination takes you!

materials

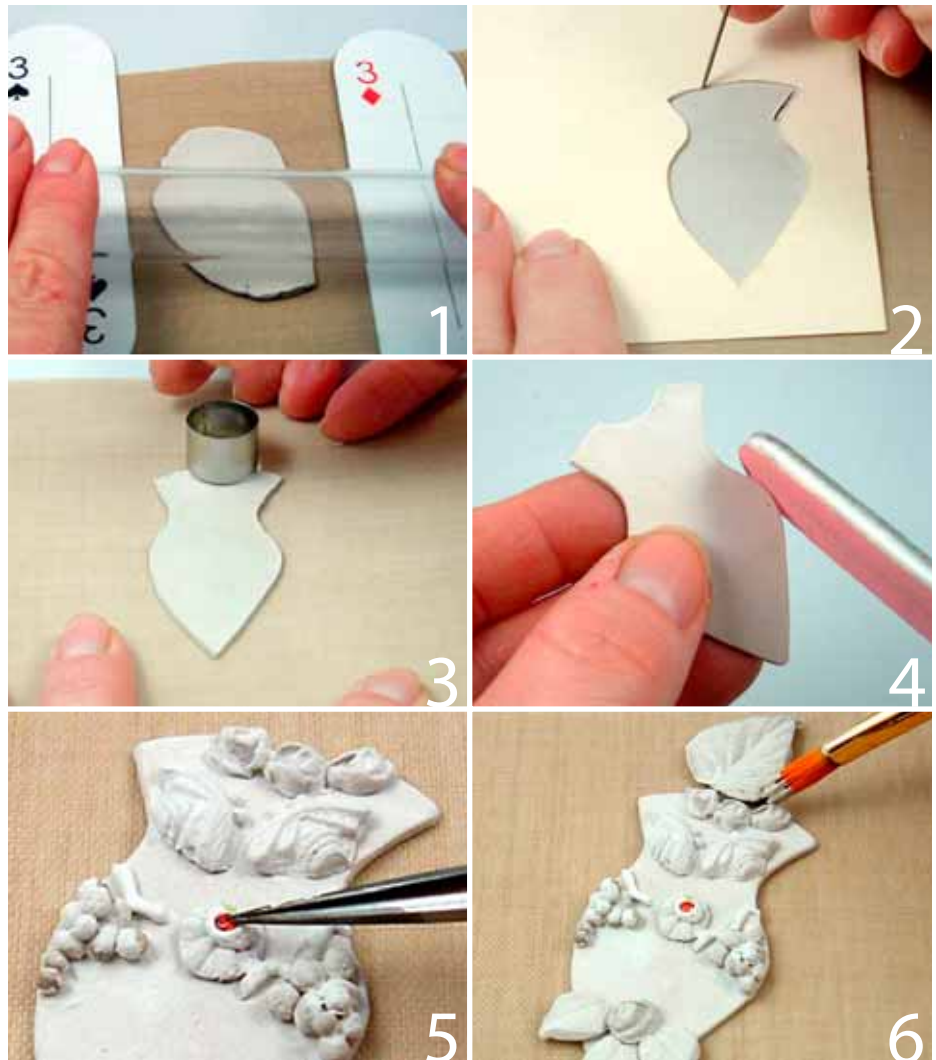
- Metal clay: 20g
- Pearls or gemstones, half-drilled (optional)
- Sterling or fine-silver wire: 20 gauge, round, half-hard, ½-in. (13mm) per pearl or gemstone (optional)
- Metal clay paste
- Gemstone (optional)
- Metal clay syringe (optional)

tools & supplies

- Olive oil
- Acrylic roller
- Sturdy, flexible work surface
- Plastic sheet protector
- Playing cards
- Cardstock
- Needle tool or craft knife
- Wire cutters
- Sandpaper: 400 and 600 grit; or emery boards
- Toothpick and candle wax (optional)
- Cotton swab and rubbing alcohol (optional)
- Clear, hard plastic
- Cocktail straw
- Kiln, kiln shelf, firing blanket
- Finishing items: steel or brass brush (optional); tumbler with steel shot and burnishing compound (optional); polishing cloth and cream, or polishing papers (optional); liver of sulfur and ammonia, salt, or baking soda (optional)
- Epoxy (optional)

resources

- Art Clay 650 Low Fire, Art Clay paste, gems, Wentol polishing cream (Art Clay World USA, artclayworld.com)
- Polymer clay tools (Polymer Clay Express, 800.844.0138)
- Cast-in-place gemstones, wire, tumbler, and working and polishing tools (Rio Grande, 800.545.6566, riogrande.com)



Process photos by Louise Duhamel.

[1] Roll the clay. Lightly apply olive oil to a sturdy, flexible work surface, an acrylic roller, and your hands. Place 15g of metal clay on the surface, and stack 3 playing cards on each side. Cover the clay with a plastic sheet protector. Use the acrylic roller to roll the clay into a rectangle that's 3 cards thick.

[2–3] Cut out the body. Trace a shape, such as the one shown in *photo 2* onto a piece of cardstock, and cut it out. Place the template on the clay slab, and use a lightly oiled needle tool or craft knife to cut out the body **[2]**. Cut a small half-oval where you'll later attach the head **[3]**. Save the remaining slab in an airtight container for later use.

Add wire stems (optional). To use half-drilled pearls or stones for embellishment later, cut a ½-in. (13mm) piece of 20-gauge sterling silver or fine-silver wire. Poke it into the body, remove it, add metal clay paste to

the wire's tip, then reinsert the wire. Add wire stems as desired. Dry the piece to bone-dry.

[4] Refine. Reinforce the piece as needed with additional paste, and let the paste dry. Then, use 400- and 600-grit sandpaper or an emery board to smooth or bevel any rough edges.

[5–6] Embellish the body. Embellish the body with small metal clay shapes as desired. Secure all the embellishments with metal clay paste. To add a small, kiln-fireable gemstone, squirt a small mound of syringe clay where you want to place the gem. The mound should be just larger than the gem. Place the gem in the middle of the mound, and press down until the clay comes up to the gem's girdle (its rim) **[5]**. During firing, the clay will shrink up around the gem and hold it in place. For more tips



Instead of using your fingers or tweezers to pick up an oddly shaped gem by its crown (top), dip the tip of a toothpick in candle wax and use it to pick up and place the gem in metal clay.

When firing gems into metal clay, use a cotton swab dipped in rubbing alcohol to remove any stray clay from the gem's crown before firing. Clay left on the gem may be extremely difficult to remove after firing.

Firing gems directly into metal clay can be risky business. Use a low-fire metal clay to reduce the risk of damaging a gem because of excessive heat.

Natural gemstones react unpredictably when fired. The main problems that occur are burning, exploding, and discoloration. Although no natural gemstones are thought to endure the sintering process undamaged, many laboratory-grown versions of natural gemstones survive quite well. Lab-grown corundum is the man-made equivalent of ruby, sapphire, pink tourmaline, topaz, and garnet. Lab-grown spinel is used as imitation aquamarine, emerald, zircon, and amethyst. Look for a "cast in place" tag on these man-made gemstone materials to be assured they will survive the sintering process with flying colors.

If you're not willing to risk a monetarily or sentimentally valuable stone, set the stone after firing using a traditional stone-setting method.

on including gemstones, see "Gems of Advice," right.

[6] Make and add the head. Cut a head of your desired shape out of your remaining clay slab. Attach the head to the body with metal clay paste [6]. Dry the piece to bone-dry.

[7–8] Attach a bail. Roll a pea-sized amount of metal clay into a 2-in. (51mm) snake [7] by moving a piece of lightly oiled, clear, hard plastic back and forth over the clay. If the snake starts to dry out, spray it with a fine mist of water and cover it with plastic wrap for a minute or two. When the snake is remoistened, add a small amount of paste to each end and to the back of the head. Press one end of the snake to the back of the head with an oiled finger. Loop the snake over an oiled cocktail straw [8] or similar cylindrical item, then press the other end of the snake next to the first one, flattening it slightly. Dry the bail to leather-hard, then remove the straw. If you cannot remove it, carefully cut each end and fire your piece with it still attached; it will burn off in the kiln. Dry the piece to bone-dry.

Refine and fire. Sand your piece as desired. Place it on a kiln shelf, cushioning it with a firing blanket, and fire it according to the metal clay manufacturer's instructions. If

you've included a gemstone, let the piece cool inside the kiln. Anything containing gems cannot be quenched in water or experience an abrupt change in temperature, as the gems may crack.

[9–10] Finish. To give your pendant a satin finish, brush it with soap and water using a steel or brass brush [9]. If your pendant doesn't contain gemstones, place it in a tumbler with steel shot and burnishing compound. Tumble it for 30–60 minutes, then rinse and dry it. Or, polish it with a soft cloth and polishing cream or with polishing paper. To patinate the pendant, apply a liver of sulfur patina according to the manufacturer's instructions [10]. Add small amounts of ammonia, salt, or baking soda to the solution to experiment with producing various colors. When you are happy with the color, rinse your piece in cold running water to stop the reaction.

Add half-drilled pearls or gemstones (optional). If you embedded wire in the pendant body, check that a half-drilled pearl or gemstone sits atop the wire with no extra wire showing. If the wire is too long, trim it with wire cutters. Apply epoxy to the wire's tip, and set the pearl or stone in place. Let the epoxy dry. 