

Edge raised framing.

By Edmund Massow

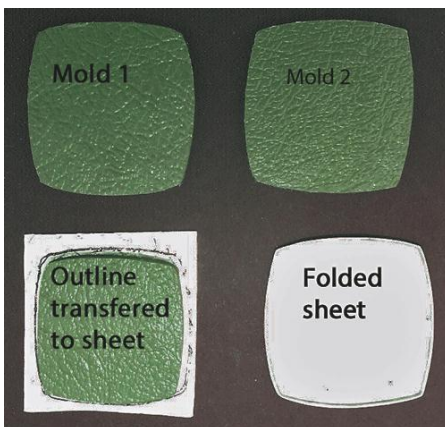
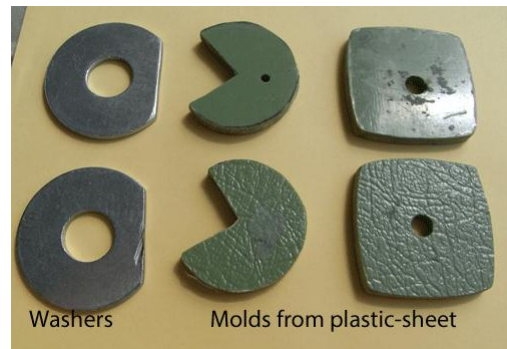
How to make frames for enamel jewelry without soldering



The simplest method to make a frame around an enameled jewelry is edge-raising. That means, the outer edge of a sheet get reverted over a mold. The mold one can make from an about 10-15 mm thick hard wood board, an acryl-glass sheet or better of a not too brittle plastic-sheet. The sheets should be about 6-8 mm thick. To avoid soldering, any

necessary findings could be glued or riveted.

However, this technique is a bit limited in the forms, sharp corners are possible, but require some effort. You can also use existing pipe sections of different diameter, a bit thicker (~2 mm) iron washers, (Pic. right) or sections angled or round bars etc. use.



Cut out from a piece of hard wood or hard plastic, the design of your work piece twice fairly congruent. The form should preferably have no sharp corners, because the frame easily folds in the corners. (Pic. left) The corners should be rounded slightly. A radius of a few millimeters is sufficient. In the center of molding, a hole should be drilled. This facilitates the later removal of the edge-raised sheet.

Before you transfer the form of the mold onto a sheet, you can texture the sheet in different manners. (Beating with a ball-hammer or with the finn of a normal hammer, scratching the surface, engraving, or print with a rolling mill if you have one etc.)

After this transfer the outline of the mold to an approximately 0.7 mm thick fine silver or copper sheet. (Pic above, bottom left). Weaker metal is not advisable, since otherwise the frame thickness is very low.

Transfer the outline of the work piece in such a manner, that it is about 3 mm larger than the outline of the mold. With a jewelers-saw with a saw-blade ~ Nr. 3 saw along the sketched line. Be sure, that the cut out is really 3 mm larger than the mold outline.



Anneal the work piece only now, because a bit hardener metal-sheet is easier to saw, as a very soft sheet. After cooling, put the sheet so between the both molds, (Pic. right) that the metal-sheet-supernatant is very equal round about. Clamp the "Sandwich" very solid into a vice. Hammering the supernatant with a mallet or a plastic-hammer in several rounds. Never fold the supernatant in one process,



because otherwise the supernatant could get wrinkles. If the supernatant fold over all around the mold very well, remove the sheet from the mold.

If you want to make earrings, drill a hole for the jump-ring or make a little cut-out into the work piece. (Pic. left, top right) You can do the same if you want to make a pendant. I prefer a small slot, because I think it looks better.

File with a not too coarse file the "rim" equal to an inner height of about 0,9 - 1,0 mm. After mechanical cleaning or pickling, the piece is ready for enameling.

I think all enameled jewelry work should get conter-enameled. If you make earrings or pendants you can start as usual. Pay attention, that you do not close the holes or the slit with enamel.



Joint



Safty catch

If you want to make a brooch, you can into the back-enameled

enclose a sort of "support" (Pic right) for the commercial findings joint and safety catch with a round base plate (Pics left). Put the rings or the box onto the back of the not enameled brooch. Apply the enamel so, that the enamel touches the support boxes. But keep the inside of the support free of enamel. Enamel the front side.



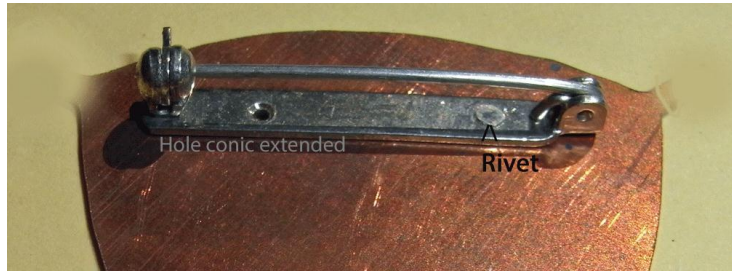
You must not make a support, but I think it looks better. The professionals look always onto the back of jewelry at first. And although gluing is no longer forbidden in jewelry, many Profs think, gluing is not professional. With this support it is nearly not to see, whether the findings are glued or soldered. If you use a fully assembled pin stem, (Pic.



Left) make a corresponding square box.



If you enameled a separate plate and you use the folded work piece as a bezel setting, (Pic left) you can the pin-stem riveting to the back of the folded



part. Important is, that one the hole makes in the same diameter as the rivet wire is, and then extended the hole conic. Otherwise the rivet doesn't have enough holding.

If you make a pendant with inlay, you also can rivet the loop to the folded frame. Also here you must open the holes conical. (Pic right)

- 1) Make a metal-strip and rivets it to the back of the frame.
- 2) Bend the strip upwards.
- 3) With a round nosed pliers bend the strip backwards to a loop.



(Pic left) Top and right bottom are brooches, left bottom a pendant. All are inlaid and glued into a frame.

The earrings (Pic right) are direct enameled into the edge raised frame. After



enameling was finished, the enamel front side was stoned and polished.

If you make irregularly earring-forms, remember, that you must construct a left and a right earring.

The description sounds more complicated, as it is the practice. If you have any questions on the subject, I try to help you further via e-mail.

If you want to use the edge-raised work piece only to frame a finished enamel-plate, you can make the work piece from an only 0,5 mm strong metal-sheet.

Finish at first the enamel-plate. I do that, because the metal-sheet gets with every firing a bit larger. The enamel plate grows indeed only a few tenth of a millimeter, but it could get large for an already edge raised work piece. Transfer the outline of the finished enamel-plate to the plastic-sheet to make the mold. Edge-raise the metal-sheet, file the rim to a proper height, grind and polish the work-piece. Don't forget to remove all grease and dirt. Otherwise the glue doesn't stick.

Adhere to the back of the beaded work piece the fixings. (Brooch-needle, eye for the loop, cufflink fastener aso). Then glue the enameled plate into the welted work piece. I adhere my jewelry very seldom. But if I do so, I prefer a two-component adhesive, because this glue compensates little unevenness.

You can also the edge-raised work piece enameling directly. Here I prefer a metal-sheet thickness of minimum 0,5 mm up to maximum 0.7 mm. I curve all my enamel jewelry a bit. These have some advantages.

The work piece gets much more stable, so you can use thinner sheets;

A thinner sheet saves weight and material-costs;

Curved panels can be ground much easier. That is especially important, if you make cloisonné- or champlevé enamel.

Produce the edge raised work piece as usual. File down the rim to about 0,7 mm. Anneal the work piece and pickle it.

The convexity you can produce in two ways.



1) Cambering over a weak domed punche; (Pic. Left) (Punches see: Otto Frei:

<http://www.ottofrei.com/store/Dapping-Tools-and-Sets/>

To No. 1) Put the work piece with the reverse side onto the punch. (Pic right). With a wooden-, a rubber- or plastic hammer beat very carefully on the edge of the frame.



Work with a very light touch around the rim to not destroy it. If you have the right convexity, anneal and pickle the piece again. Then it is ready for enameling.



2) Doming in a dapping- or depression sharpening block. (Pic left)

To No. 2) to get an equal convexity in a dapping-block, you must make an insert into the edge raised work piece. Otherwise it could happen, that the middle of the curved work piece

is higher than the rim. And that would be very negative if you grind the enameled work piece.



Transfer the outer rim of the plastic-form, which you have made before, onto a piece of cardboard. (Pic right)



Put the cardboard into the depression of the edge raised work piece. Lay the work piece with the inserted cardboard with the face-side into the depression of the dapping block. (Pic left) Hammer very careful to the back of the work piece to get the right convexity. Anneal, pickle and clean the work piece very well. Ready for enameling.

For cloisonné-enamel I prefer an inner height of the frame from about 0,7 mm. The cloisonné-wire I use have a dimension of about 0,2 x 0,8 mm. I fill the cells always until the upper rim of the wire.

So I have a bit reserve for grinding.

In my opinion, all jewelry should be conter-enameled. Make this first and don't forget to make the little frames for the needle etc. and to lay these onto the back before enameling. (Pic right). Enamel the front side and if necessary stone and polish the enamel surface. At the end adhere the findings.

