Cloisonne' Test 1

356 dk purple 2nd or 3d layer

Transparent Gradation over silver

Prepare a fine silver shape for cloisonne wires

Use a simple cloisonne wire as a boundary in the color test

Build up thin layers of transparent colors

Learn to blend transparent colors

Learn to overlap transparent enamels to create a gradation

opal white NG 302

N-38 medium green

997 light green

L96 red raspberry color L96 +755 mix (red/orange)

755 orange (looks lighter)

N69 1st layer, L96 2nd layer

531 light orange

132 light brown

997 light green

Prepare fine silver shape

cut, anneal, dome, flash silver, paint flux layer, counterenamel, scalex back

Bend a simple cloisonne wire across the shape

- 1) Bend wire, use it to divide the piece so that one side is twice as big as the other.
- 2). Dome the wire slightly so that it lays somewhat flush to the enamel surface. Dip the wire into a small amount of blu stic alue and place on enamel surface
- 3). Place on firing cloth and fire until glue burns away and wire adheres to enamel surface. Touch down wire if necessary
- 4) do not touch piece with your fingers!

ist Layer of Color (grind/wash the following colors)

N-69: bluish purple

L-96: dark raspberry pink

L-96 and 755 combo (mix half and half; grind together for slightly finer particles)

755: dark orange (even though it looks lighter or even white)

531: light orange

132: very light brown

997: very light green

N-38: medium olive green

NG-302: Opal White

Painting the 1st Layer: Feather and Taper

First Side:

Beginning at one end and on only one side (the largest side), paint a band of N-69 (bluish purple), tapering from medium thickness to almost nothing.

Next, using the L-96 (raspberry pink), feather a little bit into where you ended with a very thin amount of N69. Use the tip of your brush to swirl the colors around, gently mixing them. Then continue painting a band of the L-96 and tapering it to nothing.

Repeat this process of "Feather & Taper", using the following colors:

N-69 into L-96 into L-96/755 combo into 755 into 531 into 132 into 997

Second Side:

Begin opposite the 997 (light green area). Paint a band of N-38, tapering to nothing.

Using the Feather & Taper, technique, blend the 997 into the N-38 and taper it down to nothing.

The two greens should cover about 2/3 of the cell.

Then, from the opposite end of the cell, lay in a thick amount of NG 302 (opalescent white). Instead of feathering the opal white into the green, lay a thin amount over the thinnest area of the light green (without feathering it in).

Use the following Layout and Editing tips to help your colors blend well, and then blot and fire to just past orange peel,/just barely glossy.

Cloisonne' Test part 2

and Layer of Color

Purple/red/orange side

Paint L-96 over the Blue purple, continuing over the first layer of L96 and slightly over the red/orange combo. Then continue with Feather & Taper technique, mixing the red/orange combo into the L-96, and tapering it slightly over the 755 area.

Feather and taper 755 into the red/orange comb and taper it down over the 531.

Now start at the other end of this cell, with the 997. Taper it slightly over the light brown 132.

Now work from either end and feather/taper 531 and 132 into the remaining uncovered area.

Green Side

Paint medium blue N-62 over the N-38, tapering down to nothing midway over the medium green. Feather & Taper N-38 into the N-62, and bring it slightly over the light green 997. Feather & Taper 997 light green into the N-38 and continue slightly over the NG-302 Opal White. From opposite end, Lay in thick layer of NG-302 and slightly overlap 997 light green without feathering.

edit, checking for highs, and lows, and make sure there are no straight lines between colors. Blot, and fire to just past orange peel.

3rd Layer

Check to see if colors are as you want them. Make adjustments by adding thin amounts of color where needed. Blot and fire. Continue this until you have the colors just the way you want them.

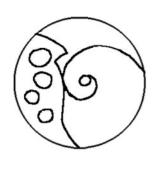
4th Laver

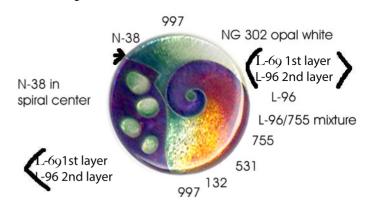
When you are satisfied with the colors, begin to add Flux (N_3) layers. I use Lump flux for all of these Lump Filler Layers. Grind N_1 or N_3 lump so that grains are slightly larger than the colors used earlier. Paint a thin layer over the whole surface. If it looks white it is too thick, and if you see exposed color it is too thin. You should have a fairly even layer and be able to see some of the color tinting the flux layer. Edit to make sure there are no thick areas. If it is a little too think it won't be a problem, just possibly require an extra layer of flux. If it is too thick it may become cloudy from excess air bubbles.

5th Layer

Repeat Flux layers until all of the enamel surface is at the same height as the wires. No low areas or depressions. Check for smaller cells where wires either come to a point, go off the edge, or create small cells.

Cloisonne Project #1





ovals: N₃8, 997, opal white

Colors

Flux: N-3 Lump for filler layers

opal white: Ninomaya NG 302 80 mesh

Red: Ninomaya (lump) L-96

oranges: Dark: thompson (lump) 755 Mikado, Light: thompson 531 burnt orange

light brown: thompson (lump) 132 toast light green: thompson (lump) 997 palm med green: Ninomaya (lump) N-38 blue purple: Ninomaya (lump) L-81

dark purple: thompson (lump) 356 concord (very little of this, finely ground)

blue for shading: Ninomaya N-62

ist Firing

Fire wires using Blu-stic glue. Dip wires into glue just enough to get a little bit on the wire. Place wire in place. Continue until all wires are fixxed. Fire until glue has burned away. It will change color from black to brown to yellow to clear. If there is some yellow residue left the wires may not be tacked down enough.

2nd Firing

Apply thin layer of transparent enamel colors, blending one into the other carefully. Keep colors light as it's easier to darken them later. Fire to orange peel.

3rd Firing

Apply second thin layer of color, slightly overlapping colors so as to not create lines where the colors meet. tint with dark purple 356 and blue N-62 if desired. Fire until orange peel.

4th Firing

Touch up any colors that you want to change. Add a darker color over a lighter color to change it. Add thin layer of lump flux N-3 wherever you don't apply color. Fire until orange peel.

5th Firing

Repeat firing thin layers until enamel reaches height of the wires. Do not apply the flux layers to thick.

If you do they will fire cloudy (remember air bubbles) and you may ruin your piece.

If the flux looks white over the color it is too thick.

If you can see color changing the color of the flux it should be thin enough. Do not fire more enamel over wires if they already have enamel over them.

Tools & Supplies

Firing

Kilns: paragon kilns

Hot Plate Kilns: Ulralite: (rio grande) ,Aamaco fine art enamel kin (clay-king.com)

Firing Stuff: (enamelwork supply, thompson enamel, rio grande)

trivets

firing cloth (rio grande)

scalex

firing trowel

firing gloves and calobar glasses

Enameling Supplies

sifters (enamelwork supply, thompson enamel, rio grande) glass brushes gold and silver foil blu-stik glue klyr fyre glue small plastic cups specialty tweezers and scissors lumps & threads

Enamel

Enamelwork Supply: japanese enamels Enamel Emporium: japanese enamels

Thompson Enamel & Rio Grande: lead free enamels, E-namels.com: vintage lead bearing thompson enamels

Grinding & Polishing

JoolTool

Lortone Beaver

 $Roloc\ Sanding\ discs\ (HIS\ Glassworks)$

Networking

www.rickyfrank.ning.com: Network for Ricky Frank Students www.grainsofglass.com: Network for Enamelists world wide

Cab Project # 1:

Prepare 8 Copper Discs, add silver foil, and apply transparent layers to learn about foils, color shading and layering.

Step 1: Prepare 8 copper shapes (24 gauge) (See "Preparing a Copper Shape")

Step 2: First layer opaque enamels (Paint and fire to glossy)

Sample #1, #2, #3, #4: 4 pieces opaque black Schauer 280 Sample #5, #6: 2 pieces opaque white Schauer 200

Sample #7, #8: 2 pieces opaque light green Schauer 6967

Step 3: Apply Silver or Gold Foil Pieces

Sample #1: Black: silver foil, abstract pattern covering a majority of the black undercoat

Sample #2: Black: silver foil, create a linear pattern, with as much or little of black exposed as you want

Sample #3: Black; gold foil, abstract pattern covering a majority of the black undercoat Sample #4: Black: gold foil, abstract pattern covering a majority of the black undercoat Sample #5: white; silver foil, abstract pattern covering a majority of the white undercoat

Sample #6: white; silver foil, create a linear pattern, with as much or little of white exposed as you want

Sample #7: green; silver foil, abstract pattern covering a majority of the green undercoat

Sample #8: green; no foil

Step 4: Paint 1st Layer of Transparent Color

Sample #1: Black: N38, 997 (2 transparents blended into one another)

Sample #2: Black: N38 (one transparent even layer)

Sample #3: Black; L96, 755, 531, 132 (several transparents blended into one another)

Sample #4: Black: L96 or 755 (one transparent even layer)

Sample #5: white; 997, N3 flux, (light value transparent blending into flux)

Sample #6: white; 997 (one transparent even layer)

Sample #7: green; 997, Schauer 6967 (one transparent uneven layer)

Sample #8: green; 997 (one transparent even layer)

Step 5: Paint 2nd Layer of Transparent Color

Sample #1: Black: N38, 997, L62 (repeat shading and add L62 over part of N38)

Sample #2: Black: N38 (repeat layer, taper layer, or shade with L62)

Sample #3: Black; L96, 755, 531, 132, N38 (repeat red/oranges and shade 132 with N38)

Sample #4: Black: L96 or 755 (repeat the same color/one transparent even layer)

Sample #5: white; 997, N3 flux, 931 (repeat, shade with 931 over 997)

Sample #6: white; 997 (repeat or shade with N38)

Sample #7: green; 997, Schauer 6967 (repeat with modeling, scraffito,)
Sample #8: green; 931 (one transparent even layer of second color)

Step 6: Paint and Fire Layers of N3 Flux

Paint a medium thickness of N3 flux and fire to glossy (or slightly underfire to orange peel) Repeat until you reach the desired depth. At least 2-3 layers.

Step 7: Finishing

If you like the surface, leave it and you are finished.

If you need to even up the surface (no low areas), grind the surface with grinding tools, clean with glass brush, and re-fire to glossy.

As an alternative to re-firing, or even after the last firing, you can also use lapidary polishing techniques.

Cab Project #2: Transparent Colors over Fine Silver Discs

Step 1: Prepare two fine silver shapes.

- 1. Using 24 to 26 gauge fine silver, stamp, cut, or saw out two shapes of fine silver.
- 2. Anneal both pieces. Look for the shine of the silver to become slightly dull.
- 3. (Roller Print): Imprint a texture on one of the pieces using patterned brass and a rolling mill. Anneal again
- 4. Create a slight dome on both pieces
- 5. Repeat directions for preparing a fine silver shape. You can "flash" the silver after you have roller printed it. Flux (N3) on front, counter enamel (at least two layers on back, Scalex fired onto backside. You will need a slightly thicker layer of flux over the roller printed piece to adjust for texture of the metal.

Step 2: 1st Layer of color

Piece # 1: L86, N72 no texture (two colors blended into each other)

Piece # 2: N69 textured silver (one even transparent color)

Step 3: 2nd Layer or color

Piece # 1: L86, N72, 356 ground fine (repeat 1st colors and shade with a dark transparent- 356)

Piece # 2: L96 (change color by covering 1st color with a second color)

Step 4: Paint and Fire Layers of N3 Flux

Paint a medium thickness of N3 flux and fire to glossy (or slightly underfire to orange peel) Repeat until you reach the desired depth. At least 2-3 layers.

Step 5: Finishing

If you like the surface, leave it and you are finished.

If you need to even up the surface (no low areas), grind the surface with grinding tools, clean with glass brush, and re-fire to glossy.

As an alternative to re-firing, or even after the last firing, you can also use lapidary polishing techniques.