

Enamel Layout and Editing

Tips for getting the colors to look the way you want them to!

Layout Tips (Blocking in the colors were you want them)

Plan ahead before applying any enamel.

Visualize what you want it to look like and how you will apply the different enamel colors to achieve the desired result.

Remember that you are using 3 different oranges (red/orange mixture, 755, 531).

Unless you want a lot of orange in your piece make sure that you use less of each orange than other colors.

Paint each color so that it is following a curve (if desired) to help keep the cell from looking “bandy”.

Editing Tips (Making changes in edges and thickness)

Keep the layers Thin and Wet.

Feather the edges where each color meets another to prevent straight lines.

Try to make a jagged or curved line so that where one color meets another it doesn't look like a straight line.

Keep the layer thin and wet:

Keeping it thin keeps the color from getting too deep in value.

Keeping it wet helps keep the enamel grains even with one another and makes it easier to feather, tap down, etc.

Look for high and low areas. Using a drop of water and a light touch of the side of the brush, try to gently nudge the high areas down into the low areas to level out the enamel layer.

Adjust your light source so that you can see the piece from different angles.

This will help you see different areas of high and low.

Take the time to make this as perfect as possible. Too thick or too thin is difficult to fix on the next layer and the colors will blend very nicely if they are applied evenly.

When you are satisfied or just feel like you've done all you can, blot both sides, and place on a firing cloth.

Fire until just past orange peel and slightly glossy.

Artistic Design Considerations

Understanding what YOU want to do

Everything you do on your piece creates a mark. Each mark becomes a design element. What is your intention? Where do you want the viewer to focus? How does your composition and use of design elements move the viewers eye across the enamel piece?

Enamel Layers Design

Color Palette

Hue: which colors you use
number of colors you use
complementary colors

Light: Type of Enamel

transparent, opaque, opalescent
layering different types of enamel

Gradation/Shading

blending one color into another
blending dark to light (gradations)
blending transparent into opaque or opalescent

Contrast

areas of depth: opaques, transparents, opalescents
edge definition: crisp or feathered
color contrasts
textured and non-textured
dark and light

Textural Details

surface texture of base metal
metallic foils
short wire inclusions
decals, underglazes, oxides
glass elements: seed beads, glass balls, threads, lumps,
enamel particle size

Enamel Layer Options

Design Choices

Metal Background

Type of Metal: fine silver, copper

Textured or plain

Methods of Texturing: roller print, engrave, stamp, chase, cast, scribe, melt

Opaque Enamel Base

Enamel Choice: Color (hue), Value (how dark or light it is)

Depth: even layer or modeled

Number of colors: one or more colors

Edge Treatment: how two colors meet (sharp or feathered)

Textured: one color or colors mixed together (salt & pepper)

Transparent Enamel Base

Enamel Choice: Color (hue), Value (how dark or light it is)

Depth: even layer or modeled

Number of colors: one or more colors

Edge Treatment: how two colors meet (sharp or feathered)

Textured: one color or colors mixed together (salt & pepper)

Light: does light come through from reflective surface underneath?

Foils

Type of Foil: fine silver, 24 k gold, hand-made

overall effect or pattern

Layer Placement: when are you adding foil layers

Shape of Foil Elements: shape, movement, edges, direction,

Transparent Overlays

Single Color

Gradated Colors

Painted Shapes

Lump Pieces

Opaque Overlays

Single Color

Gradated Colors

Painted Shapes

Lump Pieces

Sifted (stencils or scrafitto)

Enamel Removal

Diamond Carving tools to carve/remove enamel

Inclusions

Threads & Lumps

Beads (glass seed beads)

enamel balls (purchased or hand made)

Enamel Shards (broken off chunks of enamel)

Decals

Underglaze (P3 Black)

Metallic Lusters (gold/silver pens)

Learning to Enamel I

Understanding Principles

Firing: time/temperature relationship

Thermal Expansion: understanding counter-enameling

Reflectivity: how different metals reflect light when heated

Transparency: how air bubbles are created through grain size and layer thickness

Enamel Layers: Melting points of individual enamels and how one layer over another is effected by the firing process

Firing Stages: sugar, orange peel, glossy

Intention: when is your piece fired correctly? what to look for?

Understanding the Characteristics of the Material and the effect of heat/firing

Enamel

Base Metal: silver, copper, gold

Foils

Wires

Binders: water and glues

Intention

What do you want? Technically, Artistically

What needs to happen for this to occur?

What do YOU need to do to effect this?

What do you need to observe to know that this has happened?

Questions to Ask

How do I? (scientific, develop hypothesis, test and observe, develop new hypothesis)

What happens if? (directed play, try something new, experiment with no result in mind)

What do I know?

What don't I know?

What do I need to know?

What distracts me or keeps me from knowing?

What is:

urgent and interesting?

urgent and not interesting

not urgent and interesting

not urgent and not interesting

Tools: What, When, Why, and How?

What tools are available?

What is required to accomplish the task? Are there other tools you can use?

Inexpensive tools or expensive tools?

How does the tool work?

How much practice is required? To simply use it? To be skilled with it?

How to develop skill with the tool efficiently?

How does the tool interact with the material?

Accessories for tool? belts, discs, papers?

Considerations: speed, size, grit, mesh, sharpness, worn/used or new,?

User considerations: speed, pressure, angle, vision, light, endurance, wear/tear on body, safety

User taste: what do I like (to feel, see, do)

Learning to Enamel 2

Understanding the Relationship of Materials, Tools, and Your Artistic Vision

Know the Principles involved

Know what you want

How does one effect another?

Understanding where you are in the Learning Process

Beginner, some experience, very experienced?

Simply the Learning Curve by isolating what you are trying to learn (don't repeat what you already know unless necessary)

Set Goals: short, intermediate, long term goals. Be Specific. Set measurable goals. Know when you have achieved goals

Where are you:

Principles/Technique/Materials/Tools

Design

Creativity

Self-Expression

Cloisonne ' Process: Different Stages

Prepare Shape with base layers of enamel (front and back)

Wirework: Bend wires and develop line design on piece

Apply and Fire Color Layers to desired design or composition

Apply and Fire thin layers of flux (colorless transparent enamel) to reach height of wirework

Finishing: Grinding and Polishing to desired surface treatment

Enamels

Grain Size

Layer Application

Firing

Opacity/Transparency

Value/Hue

Binders/Mediums

Water: Tap or distilled

How wet is your enamel layer? Relationship of amount of water and control of grains/layers of enamel

Glues for enamel, wirework, foils

Enamel Grain Size

Large: pointillist, larger shape of single color

Medium: good transparency, solid layer of color, quicker build up to height of wirework

Small: delicate shading, details

Wirework

Type of wire: metal (silver, gold, copper)

Thickness: creates line when viewed from above, ease of bending shapes

Height: creates depth, space for enamel layers and embellishments like foils, threads, etc

Bending Wires: create shapes, walls, divisions, closed wires, floating wires, wires extending off of shape

Types of Bends: curves, angles, points, straightening lines, parallel lines, removing kinks

Putting Bends Together: to create intricate shapes or lines

Putting Wires Together: to create imagery, design, composition

Understanding Technical issues: possible problems, firing wires into place, multiple firings, how close to edge, gaps,

Doming wires to fit curvature of enamel surface

Tools: tweezers, mandrels, pliers

Learning to Enamel 3

Enamel Layers: Knowing what is possible

Transparent, Opaque, or Opalescent

Firing Characteristics of type of enamel and specific enamel colors (effects of heat and time)

Applications:

one even color

smooth gradation between two or more colors

uneven single color with highs and lows

salt and pepper blending of colors

tapered layer of a single color (thick to thin)

Partial layer: enamel not covering complete surface

banded layer: create stripes, lines, shapes

wireless cloisonné to create lines or shapes

transparent over opaque

opaque over transparent

Making changes: darken color or change hue

Foils

Metal: fine silver, gold, copper

commercial or handmade

textured foil

combining small pieces to create a pattern or texture (positive and negative shapes, background enamel color)

Transparents over foils

Chemical reactions on silver, copper

making foil

cutting foil

application and firing of foils

when to apply foils (layer height)

over lapping foils

Firing Enamels

Tools: kiln, torch, trivets, screens, firing cloths, scalex

Control of your kiln temp

Firing Stages

Safety: vision, heat

Surface Treatment

Intention: how do you want the surface to look?

Grinding surface: removing enamel to expose wires and level enamel surface, shape to follow contour of dome

Polishing: Kiln polish, scratch polish

Glass brush to remove fine particles after grinding and before re-firing