

ANATOMY OF A PIN

There's more to behold than attractive designs when you examine your collection: learn how manufacturers and real aficionados refer to the parts of a pin.

BASE METAL

The base metal used for most Olympic Games pins is copper or brass, which is die-struck or chemically etched with a pin design and then trimmed to its finished shape. A few Olympic Games pins use gold or silver as a base metal. Most pins are 0.8 to 1.5 mm thick.

FINDING

This refers to the post and the attachment device on the back of a pin. See "Types of Findings," far right.

PLATING

The metal coating or finish applied to protect the base metal and to ensure an even color on all metal surfaces. Plating is gold, bright nickel, bronze, or antique.

FINISH

The texture of a pin's surface, which is usually determined by the process used to make a pin. The most common processes are cloisonné, semicloisonné, soft enamel, and photo-etched. Each of these manufacturing methods creates raised metal ridges on a pin's surface. The spaces between the ridges are then filled with colored glass, resin, or enamel paint. When finished, the surface of a cloisonné or semicloisonné pin is hard, flat, and scratch-resistant. The finished surfaces of soft enamel and photo-etched pins, however, feature raised metal ridges that can be felt. To create a smooth finish on these pins and to protect the enamel paint from scratching, a clear epoxy coating is often added, giving the surface a smooth, domed appearance.

TYPES OF FINDINGS



Butterfly or military clutch



Tie-tack clutch



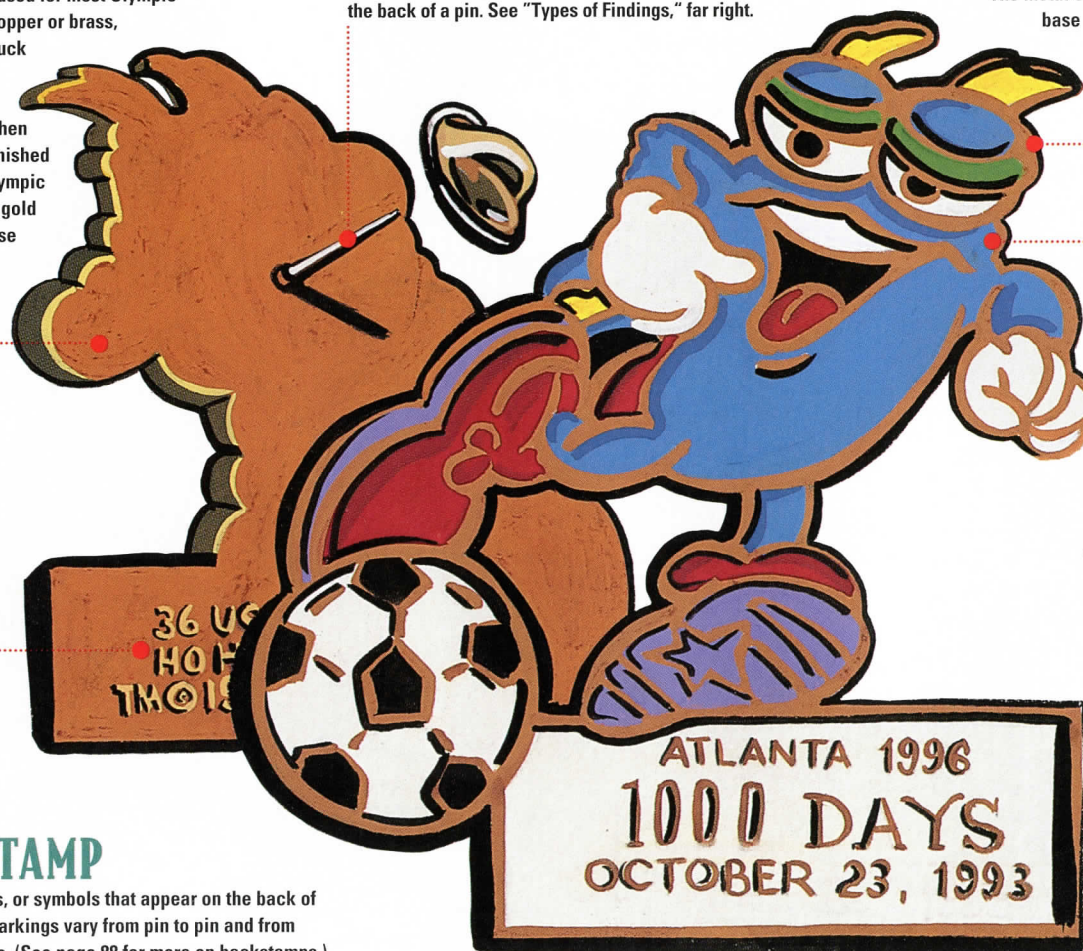
Safety pin



Stick pin

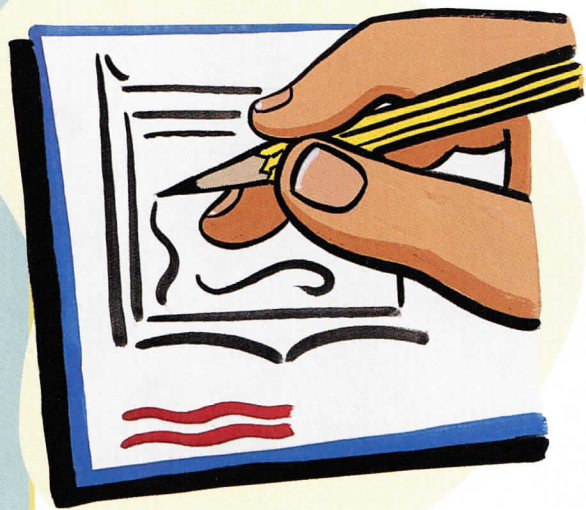
BACKSTAMP

Numbers, words, or symbols that appear on the back of each pin. The markings vary from pin to pin and from Games to Games. (See page 88 for more on backstamps.)



HOW PINS ARE MADE

Though pins are produced by the thousands, each one is a handcrafted work of art.



1. The journey begins with the idea for a pin, either sketched out on paper or drawn on a computer screen.

THE PIN-MAKING PROCESS

Discover what it takes to turn a black-and-white drawing into a colorful, three-dimensional work of art.

Almost all pins are manufactured by essentially the same process. Dozens of steps are involved, many of them done by hand, such as the painstaking application of each color. That's why every finished pin can be considered a one-of-a-kind piece of art.

DESIGN STAGE

First, the idea for the pin is established and sketched out. A designer makes this initial drawing with pen and ink or, increasingly, on a computer. The shape, size, and colors are chosen; also the type of finding (attachment device) and plating (metal finish) are selected.

Next a final black-and-white image of the pin is rendered three or four times larger than the actual pin, so that any

design flaws can be corrected before the drawing is reduced to its actual size for use by the die maker. A second copy of the enlarged drawing is marked to show the name and location of each of the colors that are to be applied to the pin.

STAMPING

Using a drawing that is the pin's actual size, a die maker cuts three steel dies—one for the design, one for the pin's exterior shape, and one for the backstamp (the words, symbols, or numbers that appear on the back of a pin).

Next, individual squares are cut from a large sheet of copper or brass. The thickness may vary from 0.8 millimeters to 1.5 millimeters, depending on the type of pin.

These blanks are then put through a stamping press, where the die imprints the design on the front and the backstamp on the back. Another die is then used to cut away any excess metal surrounding the design.



2. Steel dies are used to stamp a design onto a metal sheet (top); then the pin is cut out (bottom).



ADDING COLOR

Each pin is colored with enamel paint, powdered glass, or colored resin. On soft-enamel and photo-etched pins, all of the paint colors are applied at the same time and then baked at 110°F until dry.

If powdered glass is used, as in the cloisonné process, one or two colors at a time are dabbed on and then fired at 800°F until hardened.

With semicloisonné pins (also known as colored-resin, resin-cloisonné, or colored-epoxy pins), each resin color is applied by hand—again, one or two at a time—and then baked until hardened.

FINISHING TOUCHES

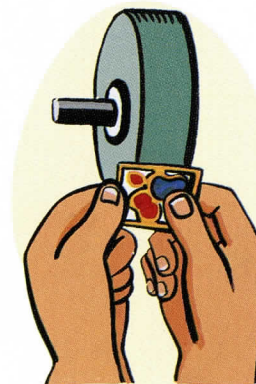
Each pin is ground and polished, either by hand or by machine, several times to remove any excess paint or glass and to smooth the edges.

A clear epoxy coating may be applied to soft-enamel or photo-etched pins to protect the enamel paint from scratches.



3. Color is applied to the pin using a fine brush or stick, then heated.

Then the finding is glued or soldered into place. Finally, the pin may be plated to give it a bright nickel, bronze, gold, or antique finish.



4. Final steps involve grinding and polishing the pin several times.



5. The finished pin is ready to be claimed by a collector.

ALISON SEIFFER (3)