

Etchings, Cuttings, Carvings, and Other Decorations - Tom Files

Types of Etchings

Needle Etching -- 1914-1918

These simple, repetitive patterns were machine produced. The piece of glass is completely covered with melted beeswax. The piece is clamped and revolves while mechanical needles trace the design, removing the wax. The piece is then immersed in acid to eat away the surface level of the glass where the wax was removed.

Pantograph Etching -- 1919-1930

A pantograph is a device to duplicate and transfer drawings. An etching design is cut on a metal plate. A worker traced the design with a stylus-the pantograph machine causing a needle to cut the same design in a wax-covered piece of glass clamped to a revolving platform. Then the piece was immersed in acid. One or several dozen pieces could be prepared at the same time depending upon the size of the pantograph machine.

Plate, Double Plate, and Silhouette Etching -- 1916-1957

Plate-By far the most popular Heisey etching method. A designer produced a drawing-a different size for each item to be etched-from a cordial to a pitcher. The design was put on a metal plate photographically and then etched to develop the design in relief. A coat of black acid-resistant ink, usually beeswax and lampblack, was spread on the plate to press it into the steel engraving. This was covered with tissue paper and rubbed firmly with a thick felt pad to transfer the ink to the paper. The paper pattern was then cut out and centered on the glass and rubbed over with felt to effect a transfer. The piece was then dipped in a water/alcohol mix to loosen the paper-leaving the black design on the glass. Melted beeswax was applied to the areas to remain un-etched. The piece was then immersed in acid. As you can tell, this process was a very labor-intensive operation.

Double Plate Etching-Same as Plate Etching except this process required two plates and two acid dippings. This process was also called "Cameo" etching since the end result resembles a cameo in a frame.

Deep Plate Silhouette Etching-First, drawings of silhouettes or solid black figures of the entire design was created. The acid bath lasted longer because of the size of the area to be etched-therefore usually creating a deeper and rougher etch.

Matte Etching-Sometimes called frosting. The area to be frosted was subjected to a weak acid solution to produce a matte finish. Sometimes part of the frosting was polished to leave a clear area.

Custom Etchings-These were made for all types of organizations and businesses such as railroads, hotels, fraternities, military academies, card clubs, and individual monograms. Examples included Fred Harvey, Santa Fe railroad, Elks, Rotary, Houston Bridge Club, etc.

Carvings

These are actually not etchings but were created by sand blasting. First a drawing or stencil was created. Then a rubber-based substance resistant to sand blasting was applied to the piece of glass. The coating was carved away based on the pattern. The exposed area was then sand blasted leaving a roughened surface that appears to be frosted.

Cuttings -- 1914-1957

At least 175 different Heisey cuttings are known. The cuttings were created by various types of cutting wheels physically removing glass to produce a design. The wheels were usually made of stone or metal.

There are three basic cuttings:

Gray-The design is gray, the way the piece was left as it came from the cutter's wheel.

Rock Crystal-The piece began as a gray cutting but then was dipped in acid to make the design bright and shiny. Most Heisey cuttings fall into this category.

Gray and Polished-These were gray cuttings with polished areas. Most of this type occurred pre-1933. Most cuttings were developed for stemware-and for baskets in the early years. Heisey cuttings came into prominence

in 1933 with the arrival of the Kralls-Emil and Willibald and later 2 of Emil's sons and 1 of Willibald. Ownership of a true Emil Krall cut Heisey piece is considered the ultimate for Heisey cutting collectors.

It is often difficult to identify Heisey cuttings. Certain cuttings were produced over and over to fulfill orders to department and jewelry stores. However, since each piece is hand-cut, variations often occurred. Also, many of the cutters experimented with creative designs of their own and did custom cutting. Glass cutting has occurred for centuries so many artisans copied Heisey cuttings or created cuttings of their own on Heisey blanks. Cutting wheels were plentiful and much less costly than the materials required for etching.

Decorations

Many types of decorations appear on Heisey glass. Most probably were not applied by the Heisey Company. Outside decoration companies acquired blanks from Heisey. Silver plate, gold, souvenir painting, enamel painting, stains, and flashing were applied by companies like Lotus, Charleton, Hawkes, and countless others.