

# Photopolymer Etching Process

Photopolymer etching, also known as photopolymer intaglio, has its origins in the development of photogravure, a process that emerged in the late 19th century where an intaglio image was created on a metal plate using a photographic transfer process. More recently, some artists and printmakers have been drawn to photopolymer etching as an alternative method for creating intaglio prints that does not involve the use of hazardous chemicals traditionally associated with etching. Light-sensitive polymer plates provide a safer and more accessible option.

## THE PROCESS

-The prints in this exhibition originated with one or a combination of Frank's photographs which are first digitally manipulated in black and white. She often layers images on one another to achieve her creative objectives.

-Once the imagery has been selected, a digital positive is created and printed electronically onto a transparent film or acetate sheet.

-To get the image onto a plate, the digital positive is positioned onto the unexposed photosensitive plate inside a vacuum frame light exposure box and exposed for a predetermined timeframe.

-After exposure, the film is removed from the plate and the plate is rinsed (processed) washing away the unexposed areas of the photopolymer, leaving behind the hardened areas that correspond to the image. The plate is then cured in three steps, using radiant heat, conducted heat and UV light.

## PRINTING

-Once color selections have been made and mixed using oil-based intaglio inks, the ink is applied across the plate(s') surface. A plate may only be printed in one color at a time.

-The surface of the plate is then wiped with tarlatan fabric, to remove the excess ink from the plate's surface while leaving ink in the recessed areas.

-To print each plate, a dampened sheet of paper is placed over the inked plate on the bed of a hand-cranked printing press and then rolled through the press under pressure ranging from 500 to 2,000 pounds per square inch. The pressure transfers the ink from the recessed areas onto the paper, resulting in the intaglio print.

-When layering a second image, the second plate is inked and then registered to the first image and the printing process is repeated. After each print, the plate must be re-inked and wiped.