

Printmaking techniques

Acids/mordants

Traditional etching uses strong acids, usually nitric, hydrochloric or Dutch Mordant (typically 10% hydrochloric acid in water with potassium chlorate added). Etching with nitric acid produces toxic nitrous oxide fumes. Hydrochloric produces hydrogen and Dutch mordant is no longer recommended as it is very unsafe.

ACR – Acrylic Resist Etching

System of etching techniques using acrylics in place of traditional bitumen-based grounds.

Acrylic Resists

Etching resists (grounds) made from co-polymer emulsions, acrylic floor polishes, acrylic inks etc. rather than traditional bitumen-based grounds.

À la poupée

Method for applying several colours to a single intaglio plate with small dabbers made from rags or felt. À la poupée means 'with the doll' in French – the doll being the rolled felt or cloth.

Aquatint

Tonal technique using resin or acrylic. Etched in acid/metal salts in timed steps to create different tones. Washed acrylic aquatints can be made on metal plates.

Baren

Japanese tool used to print woodcuts. Traditionally made of bamboo, also made from plastic.

Bite

The corrosive action of a mordant on a metal plate.

Burin

Hand tool for cutting into metal (engraving) or wood.

Burnisher

Polished metal hand tool curved or straight, for smoothing rough areas of metal plates or lightening textured areas of a mezzotint or aquatint.

Carborundum/silicon carbide

Abrasive powder comes in different grit sizes, used for graining litho stones, for preparing etching plates and for collagraphs. Can be bought as a ready-made paste for plate making.

Chine-collé

Application of thin papers collaged into the image – usually but not always monoprint.

Collagraph

A print made from a collage block often made from thick card, MDF, Perspex, metal etc. Materials are glued and modelling pastes and powders, sand and grit can also be applied to create textures capable of holding printing ink. Can be printed in relief and/or intaglio.

Collotype

Reproductive process using a photogelatin glass plate.

Copper sulphate

Mixed with salt to make metal salt etching mordant (Saline Sulphate Etch) for aluminium, zinc and steel.

Creeping Bite

Graded etching tone particularly with aquatint achieved by gradually submerging the plate in mordant.

Degreaser

Chemical used to remove grease from etching plate before applying resist. Traditionally made from ammonia and whiting powder. Safer products include soy sauce and vinegar.

Digital Print/Inkjet pigment print

Image made using computer, scanners etc. Printed with archival ink or pigment with an inkjet printer. An artist's digital print is not a reproduction but a limited-edition work of art that does not exist in any other form.

Drypoint

Direct intaglio image scratched into a metal or plastic plate to produce lines and burrs creating the characteristic fuzzy edges of the lines.

Edinburgh Etch

Mordant made from ferric chloride and citric acid used to etch copper (never put aluminium or zinc in Edinburgh Etch as this creates toxic fumes).

Edition

Set of identical prints from the same plate numbered in order e.g. 1/20, 2/20, 3/20 etc. Not including proofs.

Embossing

Raised impression made by metal or collagraph plate. Printing plates without ink results in Blind Embossing.

Engraving (metal/plastic)

Direct intaglio process using a burin to create crisp lines.

Etching

Image made on a metal plate using resist and chemicals (wax or acrylic ground/acid or metal salt solution mordant). Can be hard ground, soft ground, aquatint etc.

Ferric Chloride (Iron III Chloride)

Chemical used to etch copper. No toxic fumes are released.

Foul Bite

Accidental open bite in etching.

Frottage

Image made by rubbing textures of various surfaces though a piece of paper or cloth.

Galv Etch

Electrolytic process for etching metal plates without using acids.

Ground/Resist

The terms are interchangeable. A coating to protect an etching plate from the mordant. The image is drawn or pressed through the ground. Traditional hard ground is asphaltum (bitumen), rosin and bees wax melted onto the plate then rolled, soft ground has tallow added and never goes hard.

GSM

Grams per square metre – denoted the thickness/weight of paper

Intaglio

Printed 'in the line' – e.g. etching, engraving, drypoint.

Letterpress

Relief printing using metal type, or wood type, wood engravings, photo-etched zinc "cuts" (plates), and linoleum blocks, as well as stereotypes and electrotypes of type and blocks. In theory, anything that is "type high" and so forms a layer exactly 0.918 in. thick between the bed and the paper can be printed using letterpress.

Lift Resist/Lift Ground

Method of etching positive images drawn freely and directly onto a plate. Images are drawn with a soluble solution (sugar solution, grease etc) and covered with a hard ground. When dry the image is dissolved, lifting the ground to reveal the bare metal.

Linocut

Relief print from linoleum.

Lithograph/Polyester plate lithograph

Relies on the antipathy of grease and water. The image is drawn onto a limestone block or special metal plate, using a greasy crayon or ink (tusche). There are also photographic, polyester plate and waterless litho processes.

Matrix

What the print is taken from – metal plate, wood block, computer file, litho stone etc.

Mezzotint

Printed from specialist rocked/textured plate worked from black to white with scrapers & burnishers.

Mezzotint screen

Half-tone screen used for Solarplate and photopolymer plate preparation.

Mokulito/wood lithograph

Lithography technique using wood blocks rather than stones or metal plates.

Mokuhanga/Japanese Woodblock Printing

Traditional water based wood block printing technique, originating in China and perfected in Japan.

Monoprint

An impression printed from a reprintable block, such as a lino block or etching plate, but printed in such a way that only one of its kind exists, e.g. a printed image incorporating unique hand colouring or collage or monotype.

Monotype

One-off print, a unique impression printed off a flat surface – e.g. card, glass, Perspex, metal etc; it cannot be repeated in identical form as it is not made from a block or other semi-permanent printing matrix.

Open Bite

In etching. Exposing large open areas of a plate to the mordant.

Paper

Papers for printmaking can be handmade, mouldmade or machine made. Different mills such as Fabriano, Somerset, Hahnemühle, Arches, etc. make a variety of papers for specific techniques. E.g. a paper made for etching will have different characteristics than one made for screen printing or Japanese woodcuts.

Photopolymer film (ImagOn/Puretch etc)

Photopolymer film laminated to substrate – either printed from etched film or from metal plate etched in acid/metal salts.

Planographic

Printed from the flat – e.g. silkscreen, lithography.

Pochoir

A stencil method used to make coloured prints or to apply colour to existing prints. Ink is brushed or rolled onto the paper through a series of pre-cut stencils, each stencil representing a new layer of the image, until the final picture is complete. Originally thin metal sheets were used but stencils can be made from thin acetate (Mylar), card or paper.

Ream 500 sheets of paper.

Relief

Printed from the surface – e.g. woodcut, linocut.

Roulette

Textured dotted, lined or irregularly textured wheel-like engraving tools for making tonal areas on intaglio plates.

Scraper

Triangular metal tool used for removing burrs, correcting metal plates and bevelling metal plate edges. Also used with aquatints and mezzotints.

Silkscreen

Printing using a frame covered in a fine taut mesh through which ink is forced onto paper (or other material) beneath. Areas of the screen are masked off using handmade/hand-drawn or photographic stencils to define an image. Ink is dragged over the stencil on the mesh using a long rubber blade called a squeegee.

Solarplate

Prints from Solarplate/photopolymer plates – can be intaglio or relief, photographic or hand drawn.

Soy wax soft ground

Soft ground/resist made from soy wax and oil-based lithography ink (a safer alternative to traditional bitumen resist). Has a very low melting point

Spit Bite

Aquatint technique for graded tonal effects by applying the mordant to the plate with a brush.

Stop Out

Block out areas of an etching plate to prevent etching or further etching as with aquatint. Traditionally a varnish made with bitumen. Acrylic stop out can be made from co-polymer varnish and acrylic ink.

Tarlatan

Also known as 'scrim' or 'muslin'. Fabric used for wiping ink from etchings, collagraphs etc.

Woodcut Relief print from side grain (plank) wood block.

Wood Engraving End grain relief print.

For more information:

Royal Society of Printmakers - Printmaking Explained

International Print Center New York (IPCNY) - Glossary of Printmaking Terms

International Fine Print Dealers Association - IFPDA Glossary of Terms and Techniques