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Standard Terminology Relating to Lithographic Copy Products¹

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1. Scope

1.1 This set of definitions is intended for use by persons who, in the course of their duties, make use of office lithographic copy products.

2. Terminology

2.1 Definitions:

blanket—the sheet of elastomer-coated fabric or equivalent placed on the blanket cylinder to receive ink from the plate and offset it to the sheet or web on the impression cylinder.
blanket cylinder—a cylinder to which the blanket is attached.
blanket wash—the solvent used to clean the blanket.
blind—an image area on a plate that will not take ink. This term should not be used where no image is present.
bloom—coating that forms on rubber blankets when they are left standing. The bloom should be washed off before the blanket is used again.
cleaner sheets—sheets of blotter-like stock which are sometimes used as an aid in washing up the inked rollers.
coated offset master—a planographic surface of proper specifications on which the image to be reproduced by the lithographic process is placed.
conversion solution—an aqueous solution used to define the non-image areas of an electrostatic lithographic master by making them water receptive and ink repellent.
cylinders—any of various rotating members in printing presses; especially, one of three on a rotary offset press (plate, blanket, or impression).
dampeners—rollers that carry the fountain solution from water fountain to press master.
dampening mechanism or system—any mechanism or system employed on an offset press to apply dampening solution, or its equivalent, to a press master.
dampening solution—the aqueous solution used to keep the non-image areas of the master moist so that they will not accept ink. Also called fountain solution.
desensitize—chemical treatment of non-image master areas to make the areas ink repellent.
direct-image master—a master that is imaged by a mechanical marking device.

distributor rollers—rollers that break down and distribute the ink.

ductor roller—an ink or water roller that alternately contacts the fountain roller and the distributing roller.

electrostatic master—a master imaged electrostatically.

etch—an aqueous solution used to define the non-image areas of a paper master or metal lithographic plate by making them water receptive and ink repellent.

filling in—undesirable printing in small nonimage areas, such as halftones and small letters due for example, too much ink being run on the press.

form rollers—ink or water rollers that contact the master on an offset press.

fountain—a reservoir for ink or water.

fountain roller—the roller that revolves in the fountain.

fountain solution—the chemical solution carried in the water fountain of the offset press and used to keep blank areas of the master free of ink.

guide rollers—those rollers whose function is to control and transport the paper or substrate through the press.

gumming up—applying a solution of gum arabic, or its equivalent, to the metal master to prevent oxidation and to protect it from damage during washout, make-ready operations, or plate storage.

head margin—the space between the edge of the image and the gripper edge of the press sheet.

hollow characters—characters or lines that print as outlines.

idler rollers—rollers in the inking device of a lithographic duplicator that are rotated by frictional contact with gear-driven rollers.

ink-form roller—the roll in an offset press that delivers ink to the master in the lithographic copy process.

integrated-fountain system—a system that delivers both the ink and fountain solution to the offset master by the same form roller.

leading [pronounced *leeding*]—front or top edge as leading edge of master or blanket.

litho crayon—a greasy black crayon for drawing an image directly onto an offset master.

lithography—the process of printing from a plane surface on which the image to be printed is ink receptive and water repellent and the non-image area is ink repellent and water receptive.

master—a coated sheet of imaged material (paper, plastic, or metal) which receives the ink onto the image and which is

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attached to the plate cylinder; the ink in turn is transferred to create the final document.

offset—a printing process in which the inked impression from a printing member is transferred to a rubber blanket and then transferred to the paper being printed.

offset press—an indirect rotary press having a plate cylinder, a blanket cylinder, and an impression cylinder.

offset printing—printing produced on an offset press from a planographic master or plate.

pigment bleed—a condition in which some of the ink pigment is dispersed in the dampening solution and deposits on the non-image area of the plate and then prints as a light background tint.

piling—an accumulation of material on the blanket, rollers, and plate from various sources such as paper, ink, dampeners, and air contaminants.

planographic printing—a method of printing in which the image and non-image areas of the printing plate are in the same plane.

plate cylinder—the cylinder to which the plate or master is attached.

pre-etching—the chemical treatment of the surface of a metal plate by the plate maker, prior to application of the photo-sensitive coating, to permit the more perfect removal of coating from non-image areas.

presensitized master—offset master coated by the master supplier and ready for exposure when received by the offset printers. These masters are imaged photographically.

rollers—any of various rotating members, free or gear driven in an offset press whose function is to transfer, apply, or spread fluids onto the cylinders or to guide the paper through the printer. (See also **ductor roller**, **form rollers**, **fountain roller**, **guide rollers**, etc.)

run—the printing of the specific number of copies required on a particular job.

scum—in *lithographic images*, undesirable printing of ink in the non-image areas as a result of those areas on the plate becoming sensitized and thus ink receptive.

set-off—the unintentional transfer of part of an image or ink from its intended location to another surface.

starting solution—see **etch**.

tinting—the occurrence in lithographic copy of a more or less uniform tint of the color being printed on the unprinted areas of the sheet.

toning—the build-up of ink in non-image areas of the master from the imbalance of ink and fountain solution and its subsequent transfer to the copy.

track—the undesired appearance of ink on the copy in a repeat pattern.

walking off—the disappearance or weakening of image parts on the press master during the press run. Usually a blind image is slightly visible but ink repellent, whereas an image that has walked off is not there.

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