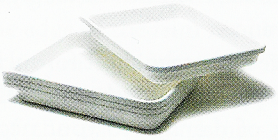
Graded contrast or variable contrast? To change the contrast of your print, you change the contrast grade of the printing paper. Each grade of a graded-contrast paper produces a single level of contrast. A variable-contrast paper produces different levels of contrast depending on the color (controlled by filtration) of the enlarger's light. See pages 116–117.

Surface finish and image tone. Characteristics vary widely, from smooth to rough finishes, glossy to matte (dull) surface sheen, cool blue-black to warm brown-black image color.

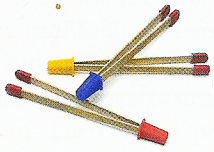
Size. Readily available sizes include 8 × 10, 11 × 14, and 16 × 20 inches; some papers are available in additional sheet sizes and wide rolls.

Weight refers to the thickness of the paper base. Fiber-base papers come in single weight (suitable for contact prints or small-size prints) and double weight (sturdier and easier to mount). RC papers come only in a medium weight that is between single and double weight.

WET-SIDE EQUIPMENT

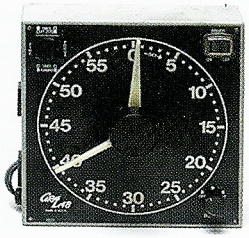


Trays hold solutions during processing. For 8 × 10-inch prints, you'll need three trays of that size, plus one larger tray for washing.

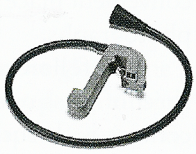


Tongs lift prints into and out of solutions, keeping your hands clean so that you don't need to wash and dry them so often. At minimum, you'll need one for developer, another for stop bath and fixer.

Safelight provides dim, colored light that lets you see well enough to work without fogging the printing paper with unwanted exposure.



Timer or clock with sweep second hand times the processing.



Washing siphon clamps onto a tray. It pumps water into the top of a tray and removes it from the bottom so that fresh water circulates around the washing prints. Special print washers are also available.

Photo squeegee or sponge wipes down wet prints to remove excess water before drying.

Drying racks or other devices dry prints after processing (see page 108).

Mixing and storing equipment is similar to that used for film chemicals (page 84): mixing container, thermometer, stirring rod, storage bottles.

CHEMICALS

Most of the chemical solutions used in paper processing, including stop bath, fixer, and clearing bath, are the same as those used in film processing. Only the developer is different. Average storage times and capacities are given here; see manufacturer's directions for specifics.

Developer converts into visible metallic silver those crystals in the paper's emulsion that are exposed to light. Choose a developer specifically made for use with paper, not film.

Stock solution lasts from 6 weeks to 6 months, depending on the developer and how full the storage container is; the more air in the container, the faster the solution deteriorates. Discard working solution after developing fifteen to twenty 8 × 10 prints per quart (liter), or at the end of one working day.

Stop bath halts the action of the developer. A simple stop bath can be prepared from about 1½ oz (46 ml) 28 percent acetic acid to 1 quart (1 liter) of water. Stop bath stock solution lasts indefinitely. Discard working solution after about a month or after treating twenty prints per quart. An indicator stop bath changes color when exhausted.

Fixer removes undeveloped silver halides from the emulsion. A fixer with hardener prevents softening and possible damage to the emulsion during washing.

Fixer stock solution lasts 2 months or more. Working solution lasts about a month in a full container and will process about twenty-five 8 × 10-inch prints before it should be discarded properly (page 86). A testing solution called hypo check (or fixer check) is the best test of fixer exhaustion.

Optional: **Clearing bath** (also called washing aid, fixer remover, or hypo neutralizer) is highly recommended when you are using fiber-base papers. It removes fixer better and faster than washing alone. Capacity and storage time vary depending on the product; see manufacturer's instructions.