Loading Film and Paper

Introduction

Loading film onto reels or prints into drums needs to be accomplished before the processing is begun. The pages linked below are detailed instructions on how to load your film or prints. Also included are pages on tank and drum care and identification of their components.

Common Procedures

If you are new to film loading, practice in the light with scrap film. After you become comfortable with the procedure, practice in the dark. With reel loading, you may need to practice before becoming proficient. It should not take long to become comfortable with the loading procedures.

All the steps for loading of film are done in total darkness. Do not use any safelight. Be sure that there is no light source, however small, in your loading area. To check the light-tightness of an area, turn off the lights and wait for at least one minute. Look around after your eyes have become accustomed to the dark. Be certain that there is no device that may light only occasionally, such as line lights on phones or space heaters. If your processor is in the same room as your film loading, cover the heating indicator. Turn off, (or cover) analyzers and enlargers, or any device with a display or lights. If there is no light-tight room available, use a changing bag, box or tent (such as JOBO's #6775).

You will need a pair of scissors (safety tipped) for 35 mm film or roll film, and a bottle opener (or film can opener) for 35 mm film. Have all tools, reels, tank body, center core, loader (if used) and lid located conveniently in front of you. A waste receptacle at arm's length would be convenient.

Check for proper assembly of tank lids (funnel in place), tank - module assembly and center core assembly (if using a module). Note their locations before turning off the lights.

You may mix reels loaded with 35 mm 120 roll film, 220 roll film and sheet film (on reels) in the same tank with these precautions. Never use 1501 reels in a 2500 series tank. Never mix stainless steel and plastic reels. Note the tank's required volume of chemicals for each type of reel you are using. Whatever the highest volume of chemicals listed will become your minimum amount of chemicals for the tank as it is loaded.

Be aware that with some black and white films, the processing times are different for 35 mm, 120, and sheet films of the same type, and may require a larger volume than minimums stated for the tank.

You should not use any tank or drum combination that would require more than the maximum volume of solution, even if it would physically fit the processor. Use of more than the maximum volume of solution will overburden the rotation motor, and may eventually damage it.
**Caution:** Always start with completely dry reels, tank or drum. Loading wet will be difficult and cause watermarks on the film.

**Caution:** JOBO's reels and center cores are designed to connect to each other. The center core and the reel are locked together, preventing the reel from rotating independently from the tank, or rattling. Do not substitute other reels or center cores. Using non-JOBO components will likely cause damage to the film or inferior processing.

**Notes:**

Different reels have different volume requirements. Be sure that the reel with the highest volume requirement is chosen for reference when combining types of reels in one tank. Some tanks have two volumes of chemicals listed on its side. One volume is for 'Inversion' the other is for 'Rotary'. The inversion volume is the amount necessary for hand processing. The rotary volume is what is required for use with a JOBO processor.

If you are using a tank with an extension module (# 1530 or # 2560), the total volume required is the sum of the tank and all modules added together. Be careful to note that some labels on modules refer to the volume requirements of the module by itself, while others refer to the volume requirements of the module and base tank together. Check the tank (or module) number stated on the label to verify. Use the tank and drum table page to identify the tank and modules. This table also has the volume requirements listed.

The plastics used in JOBO film tanks or drums are safe for use with any currently available infrared film. They are opaque to the frequencies of infrared light to which the films are sensitive. This includes the Konica and Kodak High Speed Infrared films for black and white, and Kodak Aero-Infrared Color (E-4) film. Different handling techniques may be required for loading or processing these special purpose films. Observe the film manufacturers' instructions.

**Caution:** Do not use print drums to process sheet film. All modern films have an anti-halation layer coated on the back (base) side of the sheet. This layer is removed during processing by chemicals flowing over the base side of the film. The rails of the print drums inhibit the flow of chemicals to the base side. If the backing of the film is not cleared during processing, dark spots or lines will be evident on the film. Print paper does not have an anti-halation coating and therefore is not affected by this issue. Some duplicating or display transparency materials processed with print chemicals also have an anti-halation backing, so check the manufacturer's specifications to see if it does. If the transparency material does have an anti-halation backing, it must be processed in a film or Expert Drum.