

# COLOR IT BLACK AND WHITE

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Kodak T-Max 400CN; Ilford XP-2 400; Brown/orange is Kodak film.

Since most small labs deal in color services, setting up systems for black-and-white images may not be cost effective. One solution is to use the color processing equipment you already have to produce the halftones some clients crave.

**A**S LAB OWNERS, WE want to provide plenty of lab services to our clients. But buying equipment for each specific process is not financially feasible, so the temptation is to either farm those services out, or not offer them at all.

It's hard to keep a customer base if clients have to go to another lab for some services, but we can offer a solution for bringing at least one of these services back in-house.

Black-and-white services such as copy work, conversions from color to black and white, and prints from color and black-and-white negatives may only be a small part of your income. Since

most small labs deal in color services, setting up systems for black and white may not be cost effective. The solution may be to use the color processing equipment you already have in your color labs.

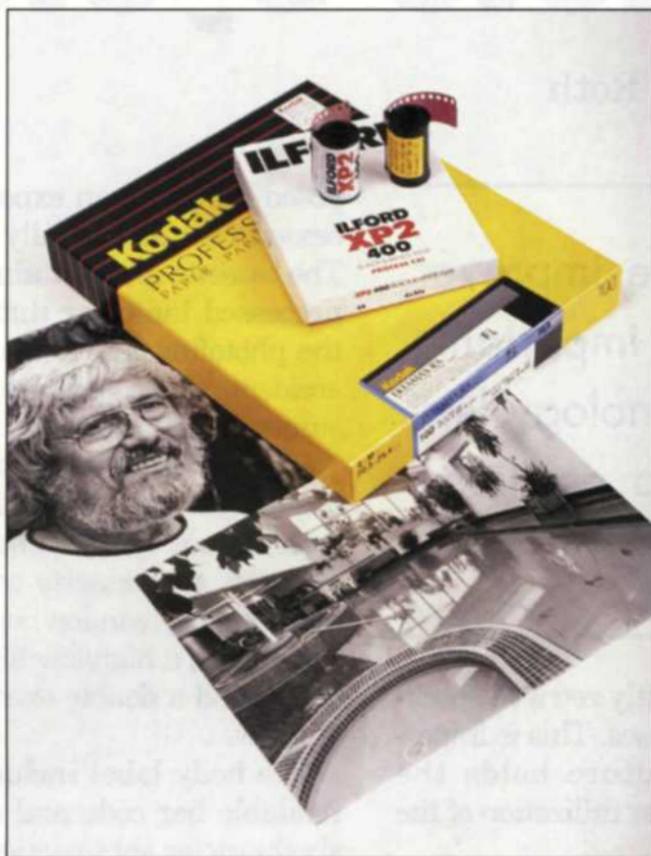
There are some black-and-white films that can be processed in C-41 color negative chemistry. This type of chromogenic film is not new: It's actually been around for more than 30 years. The early films were developed by EG&G (Edgerton, Gremerhausen, & Grier) for the military and NASA for scientific applications and were processed in C-22 chemistry. They eventually dis-

appeared when the C-41 process hit the market.

Today, we have two new C-41 black-and-white films that can be used effectively in the photo lab. The first is called Ilford XP-2 and is a refined version of Ilford XP-1. Ilford XP-2 has an ISO of 400 and comes in 35mm, 120, and 4x5 sheet film.

When processed, the film looks similar to color negative film, except that it is monochrome. Instead of having different density of silver representing shades of gray, the XP-2 negative converts the processed silver image to color dyes, and then the silver is removed at the end of the process. Gray tones in this negative are represented by different levels of color dye.

Recently Kodak entered the black-and-white C-41 market with



Kodak Extamax paper; Kodak T-Max 400CN; Ilford X-2 film.

Kodak Professional T-Max black-and-white film. This multi-layer film incorporates Kodak's famous T-grain to give extremely fine grain in the printed image. Kodak T400 CN is also an ISO 400 film, but because of its multi-layer ISO it has an automatic exposure range of 25-1600. It can also be pushed to ISO 3200 if necessary, although we don't know of many applications in the lab that would require the high ISO.

The slower T400 CN is rated, the finer the grain, but the negative is also denser at the low ISO film speeds. This means that finer grain gets you longer exposure times on the enlarger.

Both XP-2 and T400 CN can be processed in C-41 along with other C-41 color negative films. The main drawback to both films is their lack of archival quality. Since both are a C-41 color dye process, the negative life span is similar to standard color negatives, which is less than properly processed black-and-white silver negatives.

In our photo lab operation we find the archival qualities of the C-41 to be acceptable for most lab applications. We have stored color negatives in our lab for the last 20 years, and have never seen any degradation of the printed image associated with age. Keep in mind that these two films are chromogenic, so even if they start to fade a little, there are no color shifts to worry about.

These images can be printed on standard black-and-white paper using graded or variable contrast paper using a color enlarger. Increase the magenta filter until you have achieved the desired contrast level. You can also print these negatives on standard color paper, starting with 70m and 75y to get a gray toned print. Special effect colors, similar to sepia toning, can be

achieved by changing the color controls on the enlarger.

Another option is to use a new black-and-white paper that is processed in RA-4 chemistry. Kodak Ektamax RA paper was specially designed for the lab that uses a RA-4 processors for most of its work, but occasionally needs to run a black-and-white print.

In the larger labs, this work would normally be done on a rapid print black-and-white processor, and it probably makes good sense to keep it that way. But what if you are a small lab, and only need to do an occasional black-and-white print?

Can you justify the processor, space allocation, chemistry and print dryer for just a few black-and-white prints? The trade-off for this convenience is the archival properties of this paper. Again,



Black-and-white, and color prints both coming out of RA-4 processor.

this is a color process, and Ektamax RA prints will only have the lasting power of standard RA-4 color prints.

In our lab we find that most jobs done in black-and-white are for brochures, newsletters, lecture slides or posters that will have no practical application after a couple of years. Even by the next year, some products have changed or staff members in the group portrait have moved on to other jobs.

In our fast-paced world not much lasts very long anymore. The best way to handle these jobs is to ask your client how they intend to use the print, and just *how long* they plan to use it. In most cases you will find that the clients doesn't care anything about archival qualities, but only about how fast you can get it to them.

Recently, our tests on both XP-2 and T400 CN have been so impressive that we discontinued the use of standard black-and-white films and processing in our lab. We have even converted our black-and-white film processor to perform other color processes. No more special processing for black-and-white films: We just throw them in with the other C-41 films.

Don't get us wrong. We still believe in the traditional way of creating black-and-white images. We just feel those applications are more suited for fine art photography. If your client is into fine art photography, and is looking for exhibition type prints, then this method will not work for you.

But, there are many small photo labs trying to keep their clients happy and stay financially stable. Before you prejudge this process, run some tests on a couple of rolls of the film and a box of the paper. You might be surprised at the results. We certainly were and that's why we wrote to tell you about it. ^

Jack and Sue Drafaahl own and operate a custom lab in Portland, OR. They are also professional photographers, specializing in underwater photography.