KONICA SUPER SR FILMS

Hot New Technology in ISOs 100, 200, & 400

by Bill Hurter

PHOTOGRAPHIC'S USER REPORT

When photographers get together to talk about the recent "film wars," more often than not, they're talking about Kodak Vs. Fuji. Now, enter a new contender in the technology battle: Konica.

Konica entered the film fracas a little over three years ago with the introduction of their fine SR-V color-negative films. With that introduction came the fastest color-negative film yet or since introduced, Konica SR-V 3200. Last year, Konica refined those films with the introduction of SR-G films. Released in film speeds of 100, 200, 400, and 3200, SR-G films incorporated Konica's recent advances in emulsion high technology. These films used Multi-Structure crystals and high-speed chromatic couplers to reduce emulsion layer thickness and drastically increase color purity. Other practical improvements found in SR-G films were improved compatibility with flash and a marked improvement in reciprocity characteristics.

Now, in relatively short order, Konica has done it again. They have just recently introduced a new family of films, Super SR films, which mark further improvements in emulsion technology, as well as greatly expanded exposure latitude.

Super SR 100

MARKETING SAVVY

With this introduction, Konica has also initiated a marketing tool that will help the film-buying public differentiate among the new films. Each box of film is labeled with a tag line denoting the film's main purpose. Super SR 100, for example, is tagged "for universal shots," Super SR 200 advises "for portrait shots," and Super SR 400 reads "for action shots." While the knowlegeable readers of PHOTOgraphic Magazine may not find this information particularly useful, John Q. Public and his compact cameras should find the information revealing.

RESOLUTION, GRANULARITY & SPECTRAL RESPONSE

Super SR films show a remarkable improvement in granularity, thanks to the refined application of what Konica calls "Clean Multi-Structure Crystal Technology." All three films exhibit improvements in granularity—Super SR 400 has an RMS granularity of 5, while Super SR 100 and 200 have an RMS granularity of 4. To give you an idea of how good that is, Kodak's Ektar 25 has an RMS granularity of 4.

Another area where these films have been improved is in resolution. All three new films are rated by Konica as resolving 100 lpm (lines per mm); a figure that is particularly interesting for Super SR 400. As a means of comparison, Kodachrome films (25, 64, and 200) also resolve 100 lpm. While resolution stats do not necessarily translate into, "this film is sharper than that one" (there's more to film sharpness than just resolving power), they do give a valid means of comparison in one area of image quality.

Super SR 400 has been improved to offer better spectral response under fluorescent illumination. This is particularly useful to photographers in low-light, on-location assignments where fluorescent lighting is common. All three films have been improved in their response to electronic flash, giving more neutral tonal response in flash pictures.

All three films have also been improved by means of a process for excluding impurities during the silver-halide crystal-formation process. The result of this process is that the films offer truer overall color balance and the impression of excellent sharpness.

RECIPROCITY, CONTRAST & EXPOSURE LATITUDE

Another improvement is in the area of reciprocity, a film's ability to uniformly react to excessively long or short exposure times. Super SR 100 and 200 can be used for exposures

Super SR 200

Super SR 400

Super SR 100

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from 1–1/10,000 second with no exposure compensation and no color-compensating filter. For long exposure times of ten seconds, an exposure increase of +1 stop is recommended. Super SR 400 can be used for exposure times from 1–1/4000 second with no increase in exposure and no added filtration. For ten-second exposures, increase SR 400's exposure by +1 stop, and use a CC10C (cyan) color-compensating filter. Exposures longer than ten seconds should be tested for both exposure compensation and color correction.

The big area of improvement for Konica Super SR films is exposure latitude. If you want to be a bona-fide contender in the film wars, you must have films that offer incredible exposure latitude: from –2 to +3 stops. That would put your film in contention with big yellow and big green.

Super SR films are a marked improvement over SR-G films. In our tests, we found that exposure latitude was remarkable, especially in the area of overexposure. With all three films, we conducted the same test: A colorful scene with a good range of highlights and shadows was exposed at a normal exposure (verified by two meters), +1, +2, +3, +4, and +5. In the other direction (toward underexposure), frames were exposed at Normal, –1, –2, and –3. The tests provided a complete range of negatives for each film type, from three stops underexposure to five stops overexposrure.

Super SR 400

Super SR 100 proved to have the most exposure latitude: from –2 to +4. We were amazed that the prints from the +4 neg looked almost as good as the "normal" print. The –2 print was just on the cusp of acceptability. What we found with the other two films was that they could tolerate between 1–2 stops of underexposure, with the maximum acceptable underexposure about 1½ stops. On the overexposure side, however, these films seem remarkable. All three +4 negatives printed well. +5 negs, although printable, were "bullet-proof" and exhibited a rather nasty color shift.

Another interesting result we obtained from these tests is that the grain and sharpness are truly excellent. Super SR 400 "normal" prints are almost identical to Super SR 100 "normals." Even under the scrutiny of our best loupes, the grain in Super SR 400 is virtually invisible.

We expected the contrast to be similar in all three films, but were surprised to find it lower in Super SR 200. Perhaps, because the film is intended for portraits, Konica flattened the contrast somewhat.

Overall, we were highly impressed by this new generation of Konica films. In the areas where the films have to be great to make them competitive, they are. The sharpness of all three emulsions is exceptionally good. Without a good loupe, it is difficult to tell them apart. Color saturation is bold and bright, as well. The lower contrast of Super SR 200, specifically for portraits, gives the consumer a real choice between different film speeds from the same manufacturer. And, as described, the films' exposure latitude is nothing short of amazing, especially in the area of overexposure.

Konica Super SR 100 film is available in 12-, 24-, and 36-exposure rolls of 35mm, and 120-size 12-exposure rolls; Super SR 200 is available in 35mm only; Super SR 400 is available in 35mm, 120, and 110-size, 12 or 24 exposures. Konica U.S.A., Inc., 440 Sylvan Ave., Englewood Cliffs, NJ 07632; (201) 568-3100. ■