SCANNER REVIEW

These scanner tests were conducted by Robert Rankin in 2007 to 2008

A comparison of scanner quality when applied to transparency film stock such as Fuji Velvia and Kodak Ektachrome.

Summary

The following information may be of interest to anyone contemplating purchasing a film scanner for medium format work (120 size film). The conclusion is generally that the Epson range is extremely good value but the scans are not of the same sharpness as more expensive models. The Nikon 9000 ED is extremely good value as it produces scans similar to the much more expensive Imacon Flextight when an optional glass holder is used to maintain film flatness or a wet mount kit is used to hold the film flat and eliminate problems with Newtons Rings which can plague the Nikon glass mount. Scan Science (www.wetmounting.com) offers a wet mount kit for the Nikon. The Nikon glassless mount is not recommended as it cannot hold 120 size film flat enough. Glassless mounting of 35mm strips and mounted slides is fine. The once extremely expensive but now discontinued Heidelberg drum scanner appears to give a superior result to all the other models tested. Both the Nikon and Imacon images approach Heidelberg sharpness once sharpness is applied in Photoshop. However, applying further sharpness to the Heidelberg scan did not appreciably improve sharpness further. Only the Nikon (and the Epson) comes with Digital ICE (image correction and enhancment) technology which very effectively removes dirt spots from the image thus eliminating the need to clean the image in Photoshop which is time-consuming. In all tests, ICE did not effectively degrade the image and it only acts locally where the dirt was removed. This technology is invaluable. The conclusion is that the Nikon 9000 ED, using a third party wet mount system, is the best buy. Below are scans to illustrate the above points.

SCAN 1
This image was scanned using an Epson 4870 scanner ($800). Although now discontinued, the current top Epson scanners appear to be similar or slightly better and faster.

SCAN 2
This image was scanned using a Nikon 9000 ED (value $4500) using the Glass Mount (optional accessory).

SCAN 3
This image was scanned using an Imacon Flextight (value $20,000).

SCAN 4
This image was scanned with a Heidelberg Drum Scanner (extremely expensive but now discontinued).

SCAN 5
This image is the Nikon image above (Scan 2) with Unsharp Masking applied. It is now similar to the Heidelberg but not quite as sharp. The Imacon Flextight image can be sharpened similarly but the Epson could not be sharpened to the same extent.

SCAN 6
This image was scanned with the Nikon 9000 ED using a wet mount kit and then sharpened. It is very similar to the Nikon scan using a glass mount. However, the wet mount eliminates the problem of Newtons Rings which are a problem when using the Nikon glass mount. Digital ICE can still be used with the wet mount to very effectively remove dirt.