

Printing with Multigrade or Variable Contrast Papers



Years ago, when everyone printed with graded papers, if you wanted to get an in between grade then the solution was to use Dektol and Selectol Soft in combination. This was achieved by developing your print in both solutions. The procedure was to set up one tray of Dektol at say 1:3 and one tray of Selectol Soft at 1:1. Now assuming that you develop your prints (fibre bases paper) for 3 minutes then first you would place the exposed sheet in the Dektol for say 2 minutes and then into Selectol Soft for the remaining minute. This would give you a grade less than the actual paper grade. You could vary it in each tray for different results and for a lesser grade, but you were always stuck with *that* grade for the entire print.

Then along came Multigrade or Variable Contrast paper.

The original concept originated in 1912, but not introduced till 1940. By 1945 it was removed from the market and reintroduced again in 1954, but once again withdrawn 10 years later. It reared it's familiar head again in 1978, but only for RC paper then in 1986 Ilford developed Multigrade for Fibre base papers and this is where the product began to improve rapidly. It wasn't until 1994 that Variable contrast papers really showed their stuff despite what was said prior to that. It was mainly due to the introduction of a fourth layer of emulsion and advanced technology in emulsion layering and the ability of the emulsion to "read" or respond accordingly and more accurately to the yellow and magenta filters of colour heads and the different colours of other light sources.

This paper now is considered to equal or better graded papers, not only for its richness, luminosity and depth, but mainly because of its versatility.

Multigrade or Variable Contrast paper is one of the great breakthroughs with regard to darkroom printing. One of their great advantages is the ability to print part of a print at one grade and then another part of the print at another. All the prints you see here have been printed with more than one filter grade .

Another terrific advantage about multi-grade printing is that you not only have grades one to five in one box, but you also have every other number in between as well, providing you are printing with a colour dichroic head or a VCCE (Variable Contrast Constant Enlarger) head. For those of you printing with filters below the lens, you are really restricted to the major grades and half grades in between. Don't get me wrong. There is nothing wrong with

that, but your choice increases ten fold with one of the two heads mentioned. In fact since the advent of variable contrast paper the VCCE head was developed and this also has been a great asset for the modern day printer.

When using a colour head all you do is use the yellow filtration for grades 0 to 1 3/4, white light for grade 2 and the magenta filters for the higher grades. The VCCE head is based on the same principle, but the grades are listed on the dial. Any in between grade is possible with just the turn of that dial to the appropriate place.

The number of times that I print at grade 2 1/4 or just a whisker under a major grade is remarkable. If I was restricted to just printing filters under the lens my choice is only in half grades. The effort to get grade 2 1/4 or even 2 1/8 requires you to go back to using Selectol Soft and Dektol developer for that in between percentage grade. For me, after 10 years of using either a VCCE or a colour dichroic head, there is no comparison. The versatility of the two heads just mentioned is fantastic.

I would say that the most common application I use more than one grade is to burn in the sky. The finish print of **Merced River and Cathedral Peaks** has been printed on grade 2 1/4 and the extra exposure given to the sky was done at Grade 1 1/2. The reason for this is that because the peaks protrude into the sky and I wanted to burn down into the mountains the lesser grade will still darken the sky, but not to the extent that makes me feel uncomfortable. And also it will not effect the peaks too much. For my liking the heavier grade encourages the darker elements in that part of the print too much. Burning the sky at say a grade 1 or 1 1/2 softens that area. Burning with a lower grade brings in the highlights, but doesn't darken the lower values nearly as quickly. So basically you have a lot more control.

As you can see in Merced River and Cathedral Peaks when the sky is burned at the the same grade as the base exposure, the sky and mountain tops appear too heavy. It is only slight (hope it shows up under magazine printing) but for me enough. The lesser grade makes the sky look more natural and balances the photograph much better especially in the mountain peaks. If you think that burning for a lesser time would solve the problem then the highlights would not have come in enough and would look too light. The lower grade brings in the high values and retards the lower tones.

The finished print has also had some dodging applied to the trees below the mountains and extra burning lower left.

The same goes for the image **Big Sur Coast**. The entire image has been printed at Grade 2 1/2 for 25 seconds at F8. Some dodging has been applied during the initial exposure in the bottom section, but when it came to giving a little exposure to the top 1/3 then I changed to grade 1 1/2 and burnt that area at that grade. This puts some tone into the sky and darkens the hill side only slightly. The heavier grade would be too obvious.

I am sure I have mentioned this before that technique is not the solution to content, but knowing the technique can help the content. Too often I have seen promising prints from workshop participants, but they get let down by lack of technique when it comes to printing. I don't think anything can beat practice and experience. There is no fast track to success, in any field. I have a couple of friends in the film and television menagerie. Some years ago one of them began appearing on television at regular intervals. Some were quoted as saying he was an overnight success because they had not seen him before. "Yes", he replied. "An overnight success that has taken 20 years."

A bit like the story of the seasoned pro being watched by the young beginner photographer. "You do everything so quickly and determine exposure without the blink of an eye. How do you do that and what **was** the exposure?" The simple reply came back. "F8 at 30 years."

If you still want to print and enjoy the magic of the darkroom you will need to work at it. If you are trying printing via photoshop and a desktop printer, you will need to work at it. No doubt you have found that out already. It ain't easy.

The image Mt McKinlay and the Alabama Hills is yet another example of printing with various filters on the one print. My base exposure details were Kodak Polymax Fine Art (lost and gone forever) grade 2, lens set at F11 for a 10 second exposure. Additional exposure was given to the top one third of the print top left corner where the rocks begin, middle centre and middle right, bottom right corner and left corner. The filters used were either grade 0 or grade 1. Basically this was done to just put a bit more detail or tone into the area without effecting the darker tones within that area.

Next time you print and have to burn an area that requires it, try doing several burns at different grades to see the effect. You don't have to use a whole sheet of paper, just enough that will cover the area you are doing. Once again you will learn more than you realize and for the time it takes you to make and drink a cup of coffee, it will put you that one step closer to being a better printer and a better reader of a situation when it requires it.

All of us are always on the lookout for shortcuts, and the fast track to anything usually delivers mediocrity. Aim for perfection and accept nothing less. Good luck with your printing.

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