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Choosing Colour Filters

Francis Reid tries the new ROSCO SUPERGEL GUIDE

Of all the variables under the control of the lighting designer, COLOUR is probably the area where new technologies offer least help after the design has left the drawing board.

Modern microprocessor intensity controls offer a total fluidity barely dreamed of twenty years ago. New sources provide more incisive beams; and increasingly sophisticated optics enable these beams to be tailored to any desired size, shape and texture. Digitally instructed motors offer steadily increasing flexibility in remote control of direction. But, although at the very peak of the market Varilite offers an instant choice of 120 colours through remote dichroic mixing, colour planning for 99.99% of lighting designers involves choosing a palette of fixed filters. (Semaphores can give a four or five filter change on one spotlight, but their size, cost and inflexibility for mixing limits them, in my view, to inacessible positions in old theatres.)

Certainly the technology of the filters has improved in recent years with the new generation of heat resistant filters offering greatly improved colour stability. I also have a hunch that the manufacturers have been quietly strengthening the mechanical structure of these filters - my memory may deceive me (it often does) but when the new heat resistant material was introduced in the early seventies is seemed flimsier and therefore more difficult to cut and handle

than it is now.

But how to select the right gel? (No matter low sophisticated the self-extinguishing material, conforming to a whole library of DIN and other standards, I hope that we will continue to call it 'gel'). The available choice is very wide. Several manufacturers - notably Rosco, Strand and Lee - have extensive ranges. Alas they all seem to have consulted a different bingo caller for their identifying numbers. In saloon bars they tell a tale - it may be apocryphal - that an international committee sat regularly for several years to establish an international standard for numbering filters, but gave up on discovering that an eight digit code might not be sufficient for all the potential variants.

Of course the only real way to find out the effect is to try it. But there is rarely budget to cut up alternatives, and certainly never time to go up and down the ladder swapping them. I have always relied on looking at the light transmitted through a gel: partly by holding a piece up to the light (normally incandescent) or passing light through it (usually with a small spot beam torch) on to the setting or costume material, or their designs. And, of course, always noting the effect on

Now I warmly welcome a new aid. It's called the Supergel Guide, published in both pocket and poster form, and it offers suggestions on how to use Rosco Supergel filters. Rosco emphasise that its recommendations are not hard and fast rules but guidelines. The Guide's method is to group and subgroup filters into the following categories:

ACTING AREAS Acting Areas Warm Acting Areas Cool Acting Areas Neutral **ACCENTS** Accents Warm Accents Cool CYCLORAMAS AND SKYS EVENING AND NIGHT SUNLIGHT MOONLIGHT SPECIAL EFFECTS

The 'Acting Area' gels are sufficiently delicate to fall on faces, tinting the flesh without disturbing it. 'Accents' is a useful mid-Atlantic word for highlights on scenery and for the side and backlights that surround the actors, sculpting them and creating space rather than making faces visible. (The visibility of eyes and teeth that enables an actor to project being, of course, the function of the

acting area tints).

A concise general statement summarises each group whose individual filters are listed with a brief application note. These are at their best when they refer to the content within the filter of colours other than the predominant one - for example 66 Cool Blue is noted as being "a cold tint with a hint of green" whereas 82 Surprise Blue is a "Deep rich blue with a slight amount of red". The warnings are also particularly useful: 15 Deep Straw "tends to depress colour pig-ment values - use with care to avoid disturbing skin tones".

I studied the latter statement while considering the light transmitted through the sample in my swatch book and decided that it could indeed be a dangerous colour. But I liked its richness and took the risk of putting it in backlighting parcans for 'Cinderella', knowing that the oomph from a Par 64 dilutes what can be an overstated colour in an ordinary spotlight. It gave me what I

wanted, although when dimmer it needed careful mixing with a circuit of 85 ("deeply saturated blue with a hint of red") to neutralise that tendency of 15 to "depress colour pigment tones on the scenery and, especially, costumes". This was backlighting and so any tendency to "make skin tones seem artificial" was compensated by the tints hitting the actors from the front. (And here I was using the lavenders in which Rosco

The arrival of the Supergel Guide just as I was about to 'gel-up' my pantomime plan tempted me to try abandoning my usual method of using a mix of tried and tested filters from several manufacturer's ranges. Instead I experimented with using only Supergel. Some of the filters were familiar friends but in selecting others I compared what the Guide was saying with my own observation of light transmission through the swatch samples.

In general it worked. In a rig of just over 200 spotlights I had to change during rehearsal the colour in only eight - and this was because, while 73 blue had just the right green content for most scenes, it was just too much for the costumes in one key scene and so had to be modified to the 82 ("deep rich blue with a slight hint of red") which is an old favourite of mine and was already sculpting from side ladders behind each

So I found the Guide useful, if only to confirm what my ancient experienced eye was seeing through the samples in my swatch book. It will be a very positive aid to youngsters if they use it critically - and for-tunately the Guide sticks to its promise of not making hard and fast statements so that the actual words have to be subjected to interpretation by the user. Disco designers will find it particularly useful for selecting colours which are strongly dramatic yet do not make the customers look unhealthy.

Perhaps the second edition could make suggestions for complementary filters to provide good 2-colour and 3-colour mixing groups. And we should all help Rosco by submitting what we as users consider to be improvements on their wording - perhaps Rosco might like to organise a competition?

PS: I have not mentioned the Rosco diffusers whose impact on lighting design will, I believe, soon accelerate considerably. But this is a subject I hope to take up in a future issue of L+SI.

These colours, in the laven and blue ranges, work as complementary colours for both the warm and cool or colours, or where just a tou of colour is desirable. The Supergel diffusers after the designar extra flexibility. Noutral colours appear was or cool by contrast with oth 'warms and cools'

Supergel	Applications
52 Light Lavender	Excellent for general area or border light washes. It is a basic followspot colour.
53 Pale Lavender	Use when a touch of colour is needed to slightly cool white light.
54 Special Lavender	Warmer than 53. Flattering for skin tone but will turn warm when dimmed.
57A Lavender	Gives good transmission without destroying night illusions when used as a second area lighting colour.
58A Deep Lavender	Excellent backlight, Enhances dimensionality.
78 Trudy Blue	Rich medium blue that warms to lavender when dimmed.