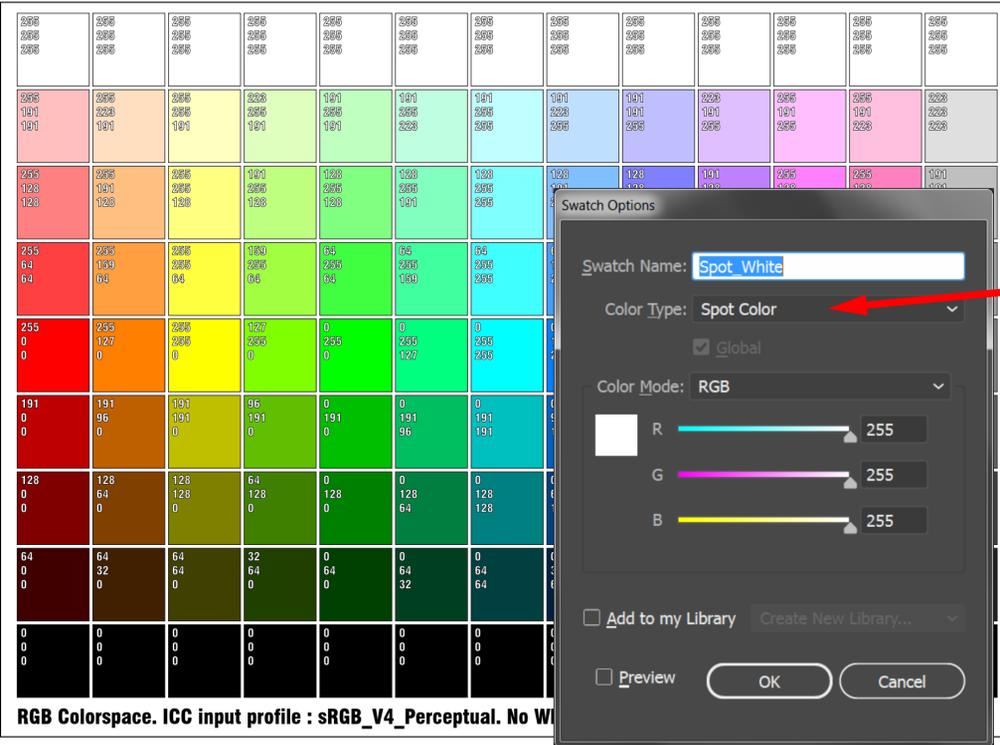# How to control White and Varnish ink channels for Mutoh Valuejet printers with specialty inks via your design?
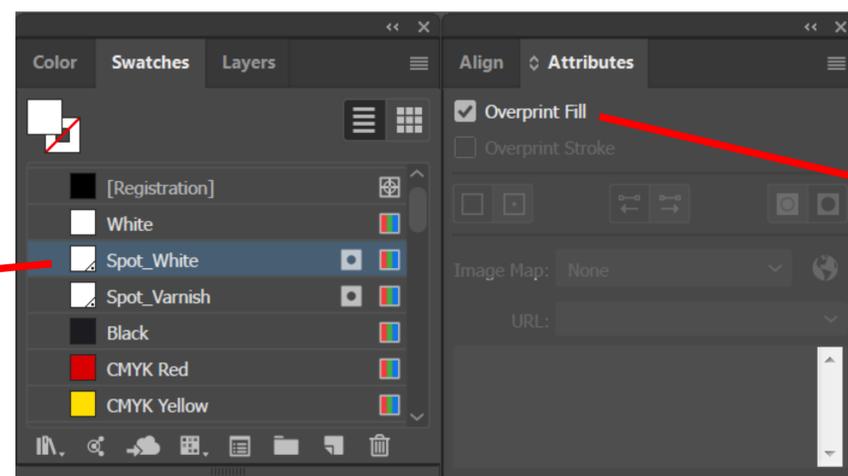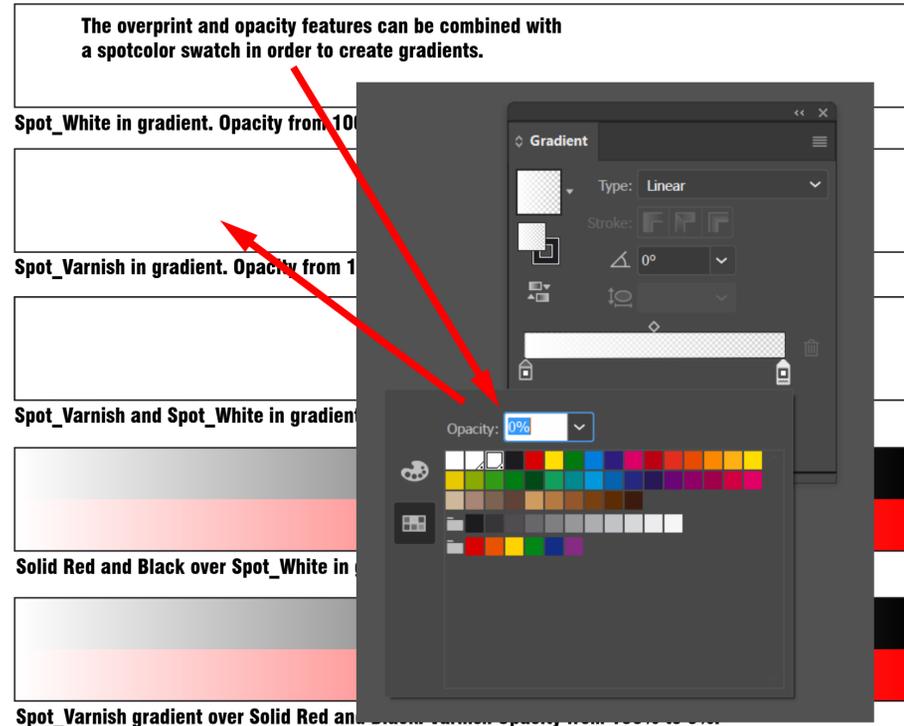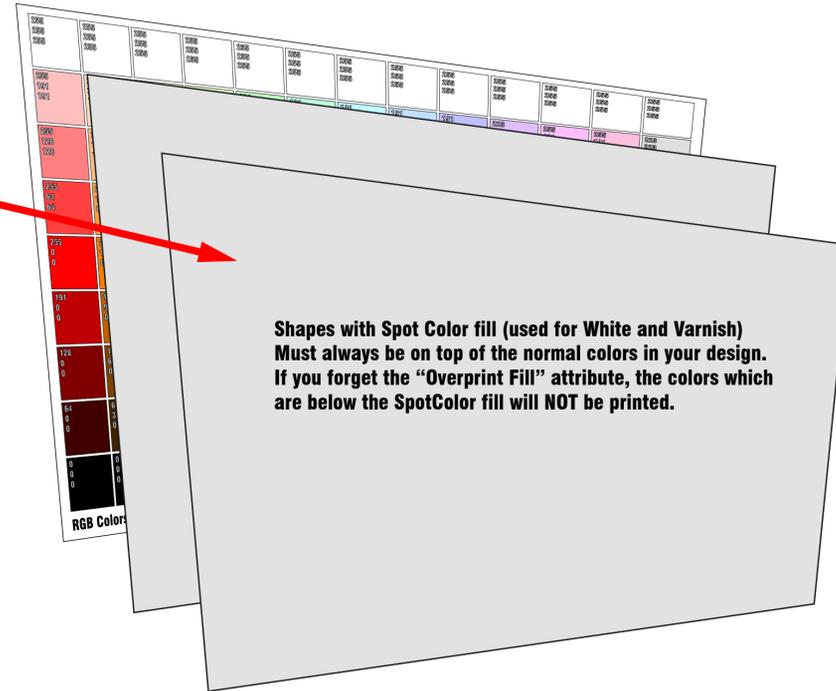

Swatch Options — Swatch Name: Spot_White — Color Type: Spot Color — Global — Color Mode: RGB — R 255, G 255, B 255

RGB Colorspace. ICC input profile : sRGB_V4_Perceptual. No Wh...

Swatches: [Registration], White, Spot_White, Spot_Varnish, Black, CMYK Red, CMYK Yellow

Attributes: Overprint Fill

Create a shape with Spot Color fill. Select the exact same name for the fill shape like in the spotcolor replacement list from your Rip Software. In case you want to mix a spotchannel with normal CMYK/RGB you must check the Overprint checkbox.
IMPORTANT : The overprinted shape must always be on top of your normal color space. (see the image to the right as an example). The final order of ink channels (example : white at the bottom, color in the middle and varnish on top) will be determined by the driver of your Rip Software.

Shapes with Spot Color fill (used for White and Varnish)
Must always be on top of the normal colors in your design.
If you forget the "Overprint Fill" attribute, the colors which are below the SpotColor fill will NOT be printed.

The overprint and opacity features can be combined with a spotcolor swatch in order to create gradients.
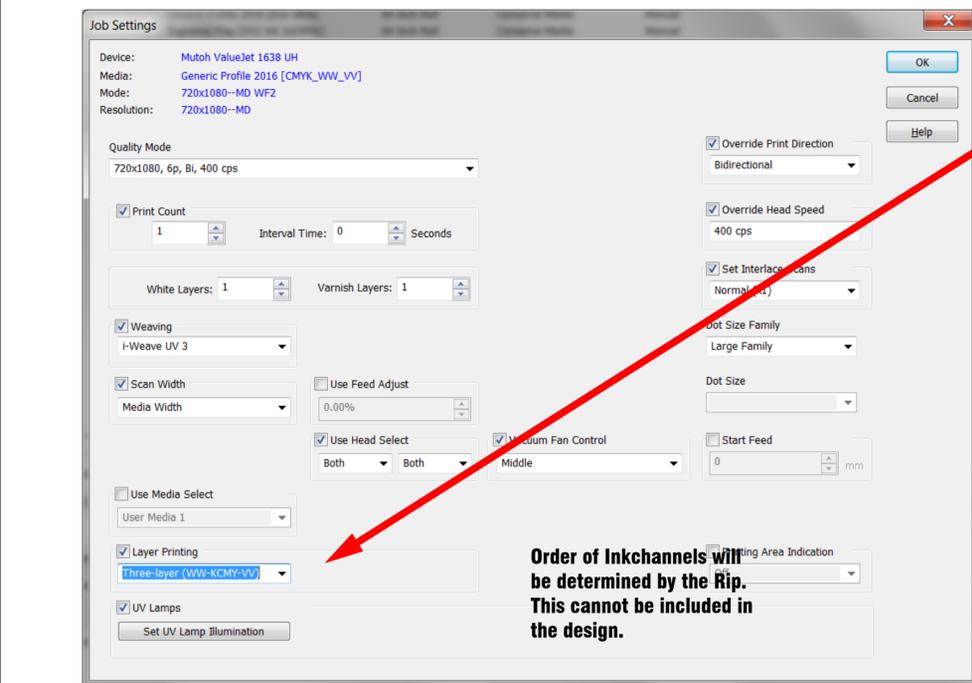
Spot_White in gradient. Opacity from 100...
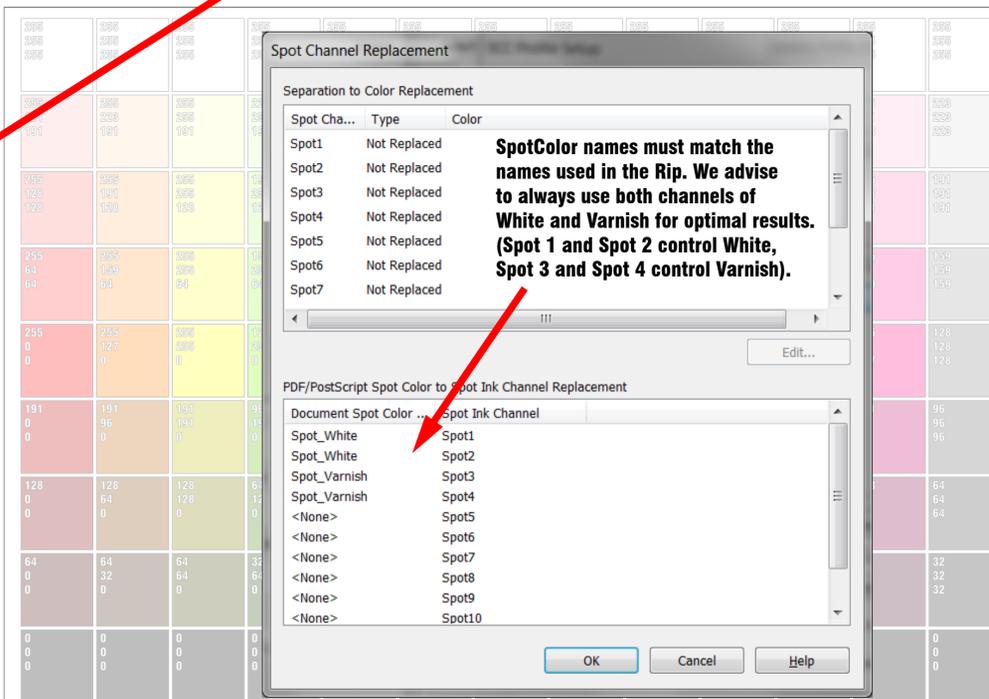
Spot_Varnish in gradient. Opacity from 1...

Spot_Varnish and Spot_White in gradient...

Solid Red and Black over Spot_White in...
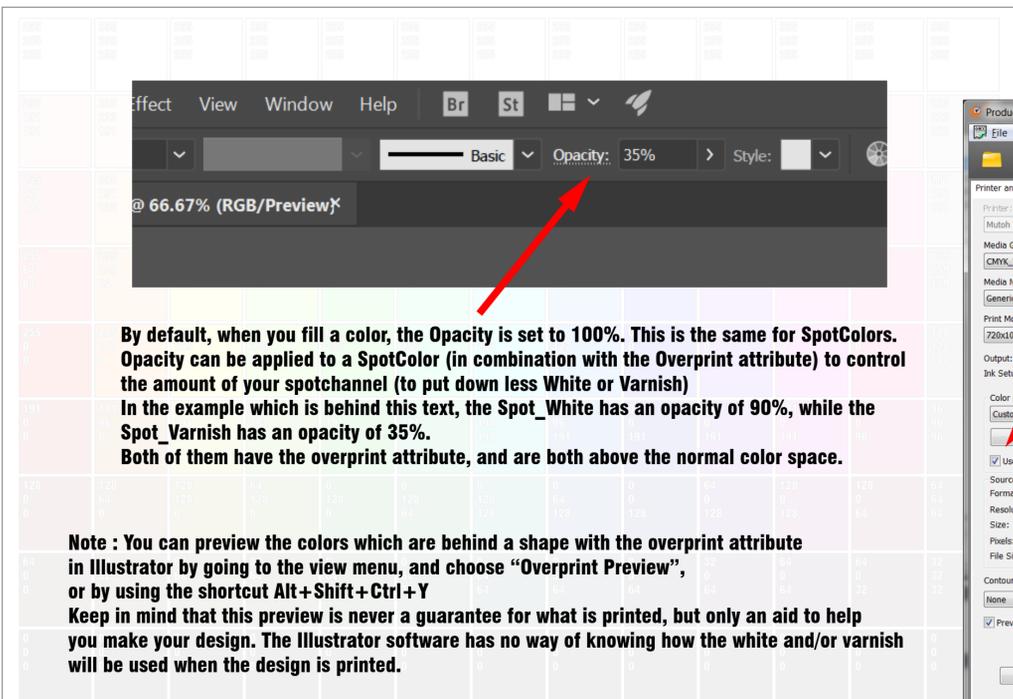
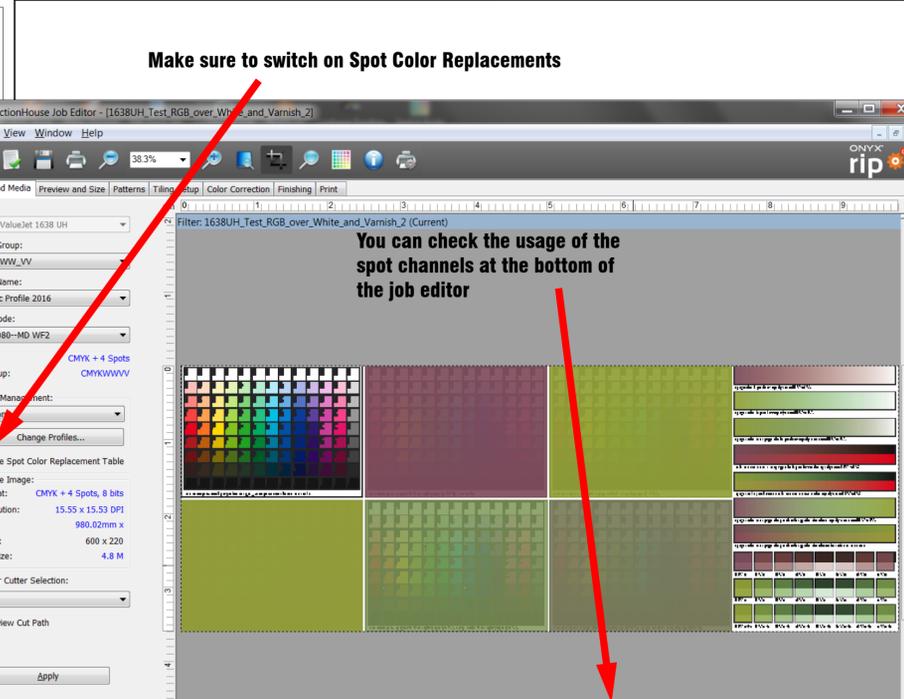Spot_Varnish gradient over Solid Red and Black. Varnish opacity from 100% to 0%...

Gradient — Type: Linear — Opacity: 0%

Job Settings — Device: Mutoh ValueJet 1638 UH — Media: Generic Profile 2016 [CMYK_WW_VV] — Mode: 720x1080~MD WF2 — Resolution: 720x1080~MD

White Layers: 1 — Varnish Layers: 1

Order of Inkchannels will be determined by the Rip. This cannot be included in the design.

Spot Channel Replacement
Separation to Color Replacement

Spot Cha...	Type	Color
Spot1	Not Replaced	
Spot2	Not Replaced	
Spot3	Not Replaced	
Spot4	Not Replaced	
Spot5	Not Replaced	
Spot6	Not Replaced	
Spot7	Not Replaced	

SpotColor names must match the names used in the Rip. We advise to always use both channels of White and Varnish for optimal results. (Spot 1 and Spot 2 control White, Spot 3 and Spot 4 control Varnish).

PDF/PostScript Spot Color to Spot Ink Channel Replacement

Document Spot Color	Spot Ink Channel
Spot_White	Spot1
Spot_White	Spot2
Spot_Varnish	Spot3
Spot_Varnish	Spot4
<None>	Spot5
<None>	Spot6
<None>	Spot7
<None>	Spot8
<None>	Spot9
<None>	Spot10

RGB Colorspace. Spot_White + Overprint (Opacity 50%). Spot_Varnish + Overprint (Opacity 50%).

Opacity: 35%

By default, when you fill a color, the Opacity is set to 100%. This is the same for SpotColors.
Opacity can be applied to a SpotColor (in combination with the Overprint attribute) to control the amount of your spotchannel (to put down less White or Varnish)
In the example which is behind this text, the Spot_White has an opacity of 90%, while the Spot_Varnish has an opacity of 35%.
Both of them have the overprint attribute, and are both above the normal color space.

Note : You can preview the colors which are behind a shape with the overprint attribute in Illustrator by going to the view menu, and choose "Overprint Preview", or by using the shortcut Alt+Shift+Ctrl+Y
Keep in mind that this preview is never a guarantee for what is printed, but only an aid to help you make your design. The Illustrator software has no way of knowing how the white and/or varnish will be used when the design is printed.

Make sure to switch on Spot Color Replacements

You can check the usage of the spot channels at the bottom of the job editor

RGB Colorspace. Spot_White + Overprint (Opacity 90%). Spot_Varnish + Overprint (Opacity 35%).