ASH PRINT

BESPOKE PRINT AND CUSTOM PACKAGING

Fuji Revoria Press

Design and File
Preperation Guide

Contents

Revoria Press™ PC1120
– opening a fresh mindset

Revoria Press™ PC1120 is a new six colour digital press which uses Silver, Gold, White, Pink and Clear to bring back the luxury to print.

Many designers dream of working on a project which involves specialty inks. Finishes such as varnishes and metallics are applied by industrial printers but mostly off limits in everyday digital print design. Time and cost can make special ink jobs a rarity.

The Revoria Press™ PC1120 means quicker, easier, more affordable inclusion of speciality inks. It lets you combine four-colour imagery with two specials – Silver, Gold, White, Pink or Clear – in a single run. With all the digital print benefits – like economical short runs and personalised print. It also broadens your choice of specialty paper stocks – further enhancing your luxury options.

Specialty inks
The specialty inks available for the Revoria Press™ PC1120 are Gold, Silver, White, Pink and Clear. You can print any two of these specials plus CMYK in a single pass.

## Six colour stations – where they sit and why it matters
The Revoria Press™ PC1120 has six colour stations – Cyan, Magenta, Yellow, Black and two specials. The first specialty ink station sits at the beginning of the print process, the second specialty ink station at the end of the run. So the CMYK print stations sit in between the two specialty inks. It's really important to note this sequence – it dictates how you must design and prepare artwork files.
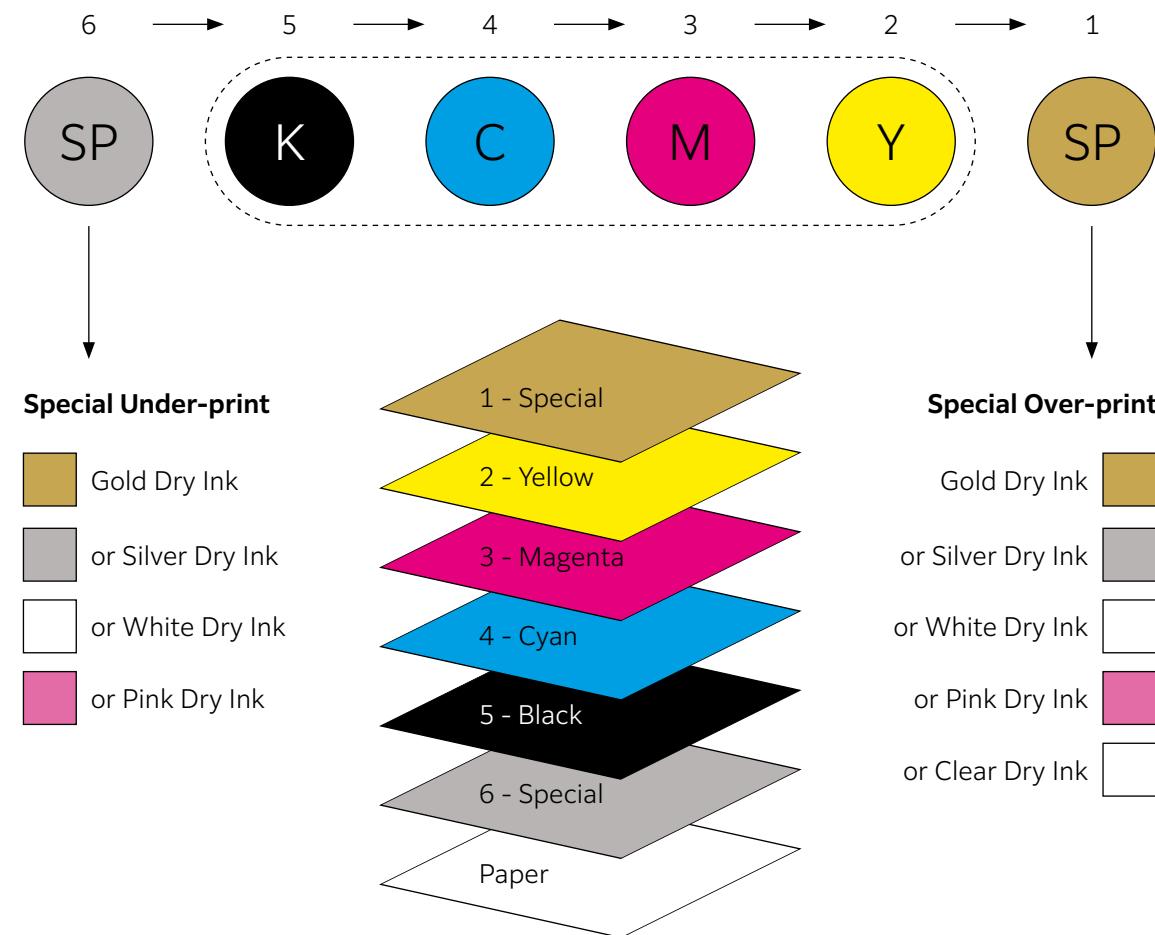
The special ink on Station 6 (choice of Gold, Silver, White or Pink) prints under CMYK and the special ink on Station 1 (choice of Gold, Silver, White, Pink or Clear) prints over CMYK. When setting up artwork, think of the process like screen printing where the number of production steps are based on the number of inks printed. Note: Pink must print over CMYK to achieve PANTONE® colours.
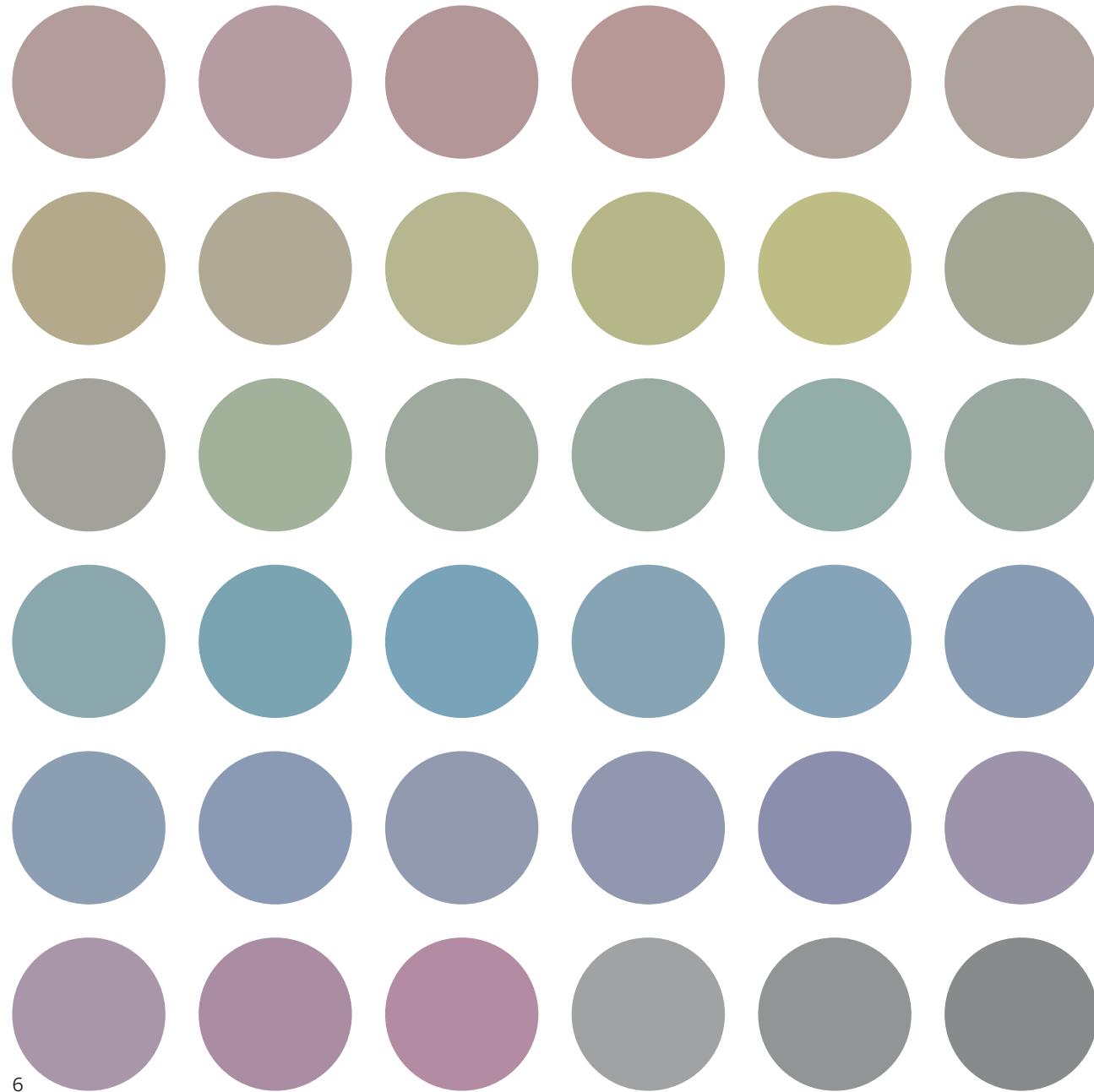
Specialty Colour Swatches for Adobe Software

Make specialty colours a standard component of your design palette. When you need a vibrant visual, think about the impact a palette of metallic hues can make.

The swatches on the left show a sample of the many colours available.

FUJIFILM Business Innovation Metallic Swatches are available to download from the IP address of your Revoria Flow™, alternatively contact a FUJIFILM Business Innovation Australia specialist.

The swatch libraries contain a wide range of pre-defined metallic colours which you can import straight into Adobe Design software.

To add swatches
Download the swatches from the Revoria Flow™ print server using your IP Address.

From the Adobe design software colour swatches panel, select Load Swatches and locate the ASE swatch files you downloaded.

Select the ASE files and they will be loaded into your swatches panel, ready for use.

Think in layers

Specialty effects reproduce best on stocks with very smooth paper surfaces, such as coated or silk.

It's always a good idea to proof a design on your chosen stock prior to a full production run. This will help ensure the final result matches your intent.

When using layers with the Revoria Press™ PC1120 they must be arranged within in your files to mimic the order in which the inks are applied on the press.

A metallic layer of Silver or Gold may be applied as the first layer on the page, creating an underlay for the metallic hues. Or a layer of White can be applied as an underlay for CMYK when printing on coloured paper stocks.

CMYK elements are printed as the second layer.

Silver, Gold, White, Pink or Clear may be used on top of CMYK as a spot overlay – this is the third layer.

A range of PANTONE® colours can be achieved by printing Pink on top of CMYK.

Overlay
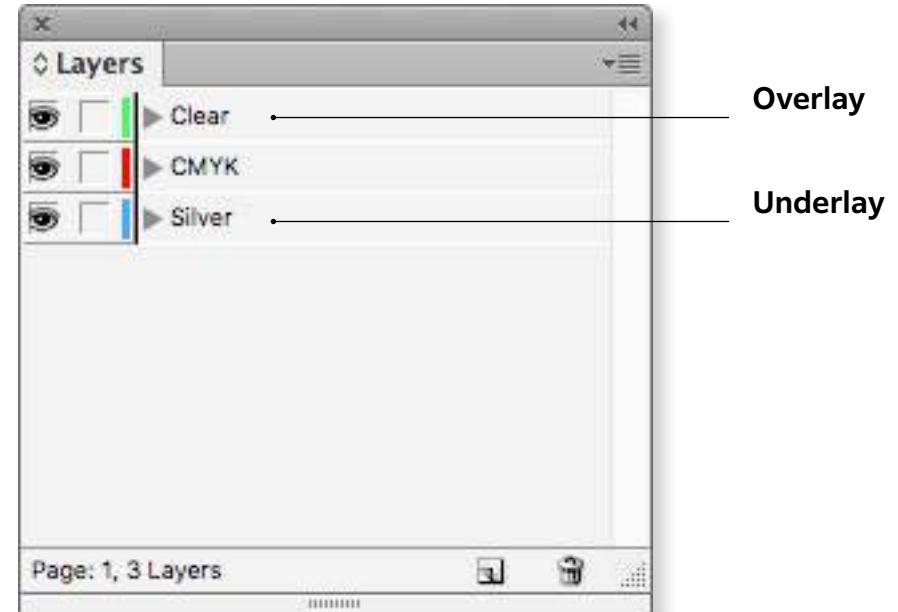
Underlay

Limitless possibilities

How to choose your underlay colour – special considerations:

- Use Silver as an underlay when you want a neutral metallic
- Use Gold as an underlay when you want to create metallic hues with a warmer glow
- Gold works best when enhancing colours such as reds, pinks, oranges, and browns
- Clear can only be an overlay
- Pink is best used as an overlay

The Revoria Press™ PC1120 uses CMYK mixed with Silver or Gold to create metallic colours. So your design can use as many metallic colours as you like. You could, for example, print a continuous spectrum of metallic colour or create a metallic texture using different percentages of Silver or Gold printed underneath CMYK – the combinations are almost limitless.

You can create your own metallic effects by setting up a layered document in Adobe InDesign and multiplying a layer of CMYK (or Pink) over a layer of Silver or Gold.
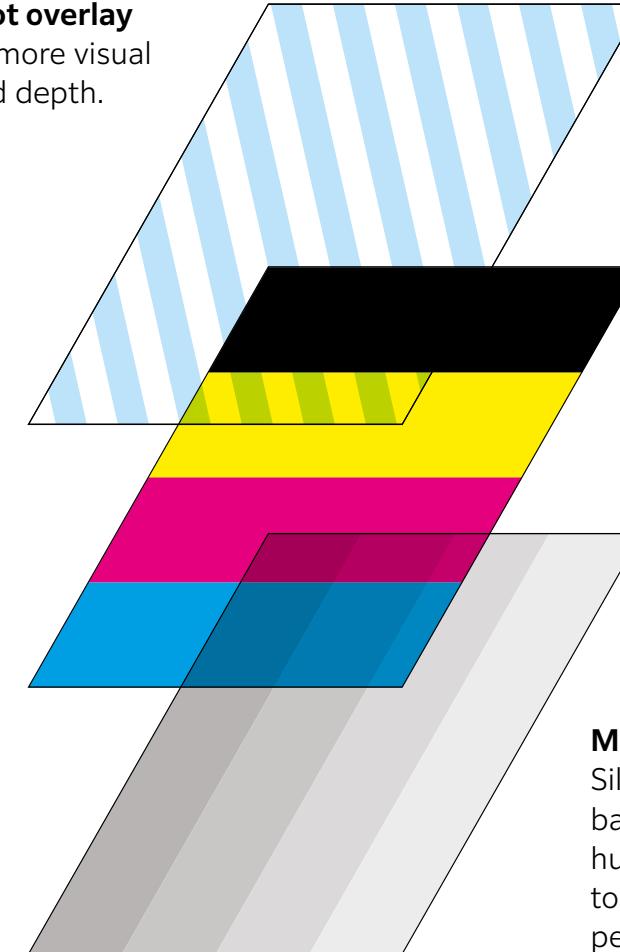
Metallic underlays do not have to be 100% – reducing the percentage of metallic ink to 60% often produces better results with softer, smoother hues.

Likewise for the CMYK (or Pink) layer – lighter tints of colour often produce more vibrant metallic hues because they allow the metallic underlay to shine through.

It is important to use layers in your artwork to ensure colours are correctly organised ie. Silver artwork placed on a layer named Silver. This will help you to visualise the separations, understand the order of printing, and make it easier to control over-printing and knocking out of objects or text.

A Clear spot overlay
Adds even more visual interest and depth.

CMYK tints
Blend CMYK (or Pink) with Silver or Gold to create metallic colours. Lighter CMYK tints often produce more vibrant metallic hues.

Metallic underlays
Silver or Gold provide the base sparkle for metallic hues. Underlays do not have to be 100% – reducing the percentage of metallic ink to 60% often produces softer, smoother hues.

How to add a spot colour
to graphics or text

This example demonstrates the process in Adobe InDesign but the same process applies to Adobe Illustrator.
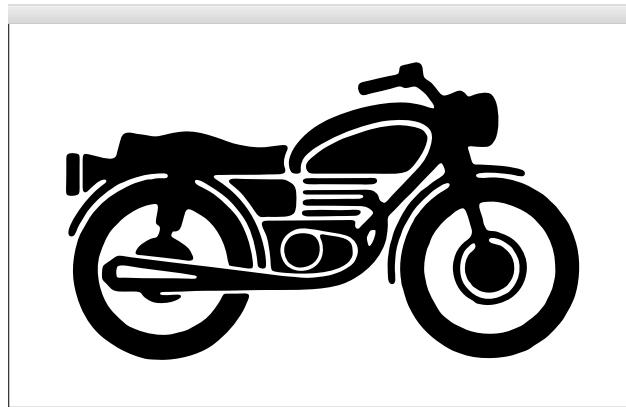
Check that your document is set up for Print.

Paste vector objects, draw and fill a shape, or select text that you want to be a spot colour.

Add a new layer and name it Silver (with a capital S).

If you're using Gold, name it Gold (with a capital G).

If you're using Pink, name it Pink (with a capital P).

Cut and paste your objects onto that layer.

Note: Capitalisation of both the layer and colour name is important! It lets the press know where to apply the specialty ink.
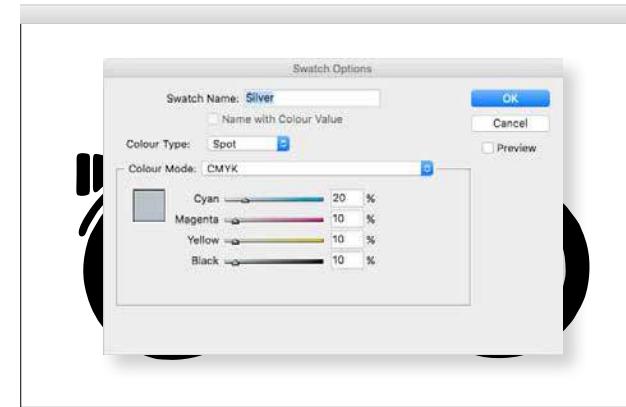
Make a new swatch 20C 10M 10Y 10K, designate as a spot colour and rename it Silver (with a capital S).

For Gold, make a new swatch 20C 30M 80Y 0K, designate as a spot colour and rename it Gold (with a capital G).

For Pink, make a new swatch 0C 100M 0Y 0K, designate as a spot colour and rename it Pink (with a capital P).

Select the objects in your layer and fill them with the spot colour you created.

The spot colour will knock-out any colours or images underneath it.

If you multiply the spot colour object, it will overprint. 50% Pink multiplied over yellow will make bright orange.

You can try gradients and patterns too.

Discover the brilliance of White

When you hold a printed piece that features White ink, you know that it's special, especially when printed on specialty paper stock.

Using the Revoria Press™ PC1120, White ink can be digitally printed as an underlay for printing four-colour images on coloured paper or it can be used as a traditional spot colour; either by itself, or in combination with spot metallics, spot Pink or spot Clear.

How to add a White spot colour
# to your artwork in Adobe InDesign
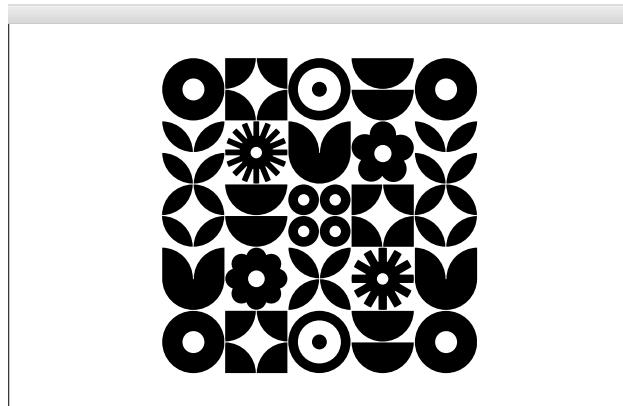
Check that your document is set up for Print.

Paste vector objects, draw and fill a shape, or select text that will have the White ink applied.
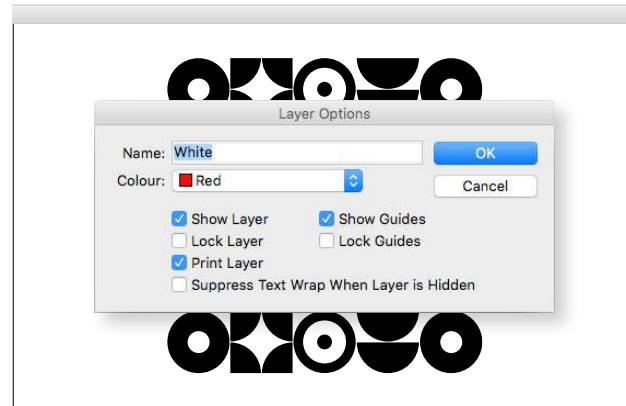
Add a new layer and name it White (with a capital W).

Cut and paste your objects onto that layer.

Note: Capitalisation of both the layer and colour name is important! It lets the press know where to apply the specialty ink.
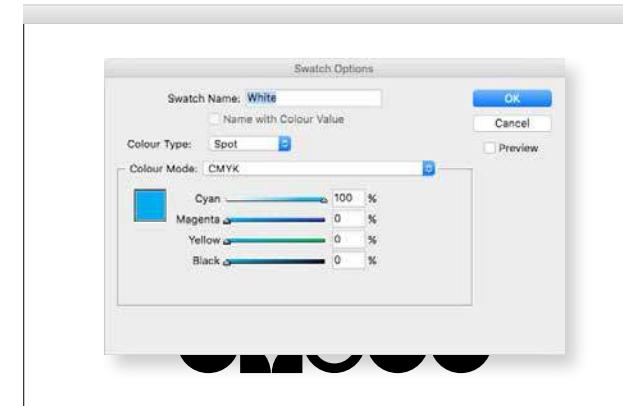
Make a new swatch 100C 0M 0Y 0K, designate as a spot colour and rename it White (with a capital W).

Note: Capitalisation of both the layer and colour name is important! It lets the press know where to apply the specialty ink.
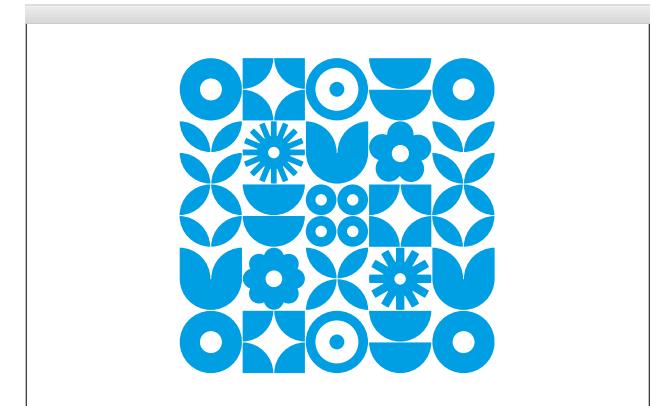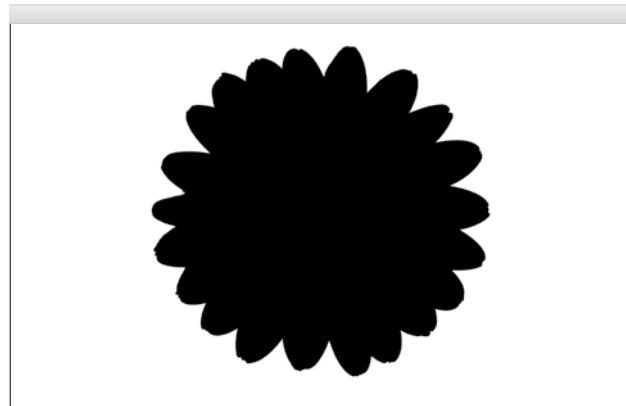
Select the objects on your White layer and fill them with the White spot colour, which appears as Cyan on screen.

How to create a White underlay
for CMYK images

Open the file you want to add a White underlay to in Adobe Photoshop and convert the colour mode to CMYK.
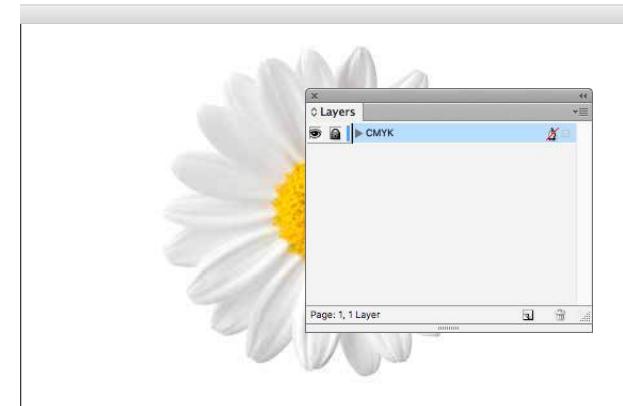
Make a selection of the areas you want to underlay with White.

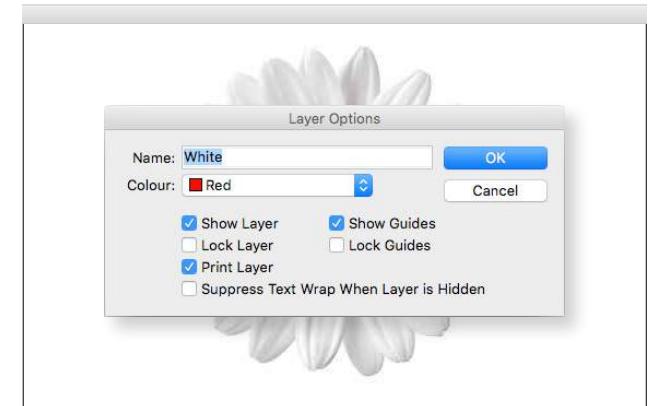Create a new layer and fill the selection with black.

Turn off the CMYK layer and convert the file to Greyscale.

Save as a JPEG with 'White plate' in the file name.

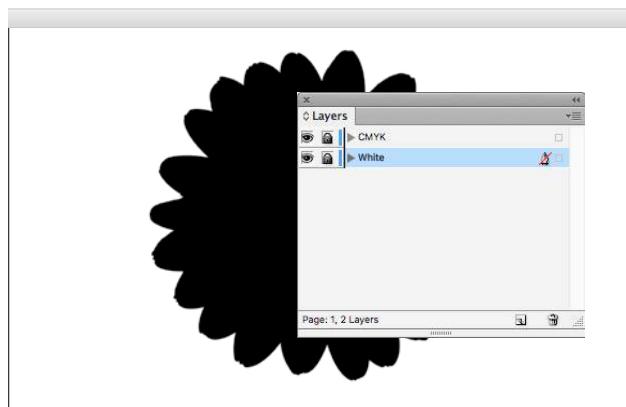Open a document in Adobe InDesign and import your CMYK image.

Open the Layers window and name the layer CMYK.

Duplicate the CMYK layer and name the bottom layer White (with a capital W).

Note: It's important that the White layer is on the bottom, underneath the CMYK layer.

How to create a White underlay
for CMYK images (continued)

Make sure the White layer is underneath the CMYK layer.

On the White layer, replace the CMYK image with the 'White plate' greyscale image you created in Adobe Photoshop.
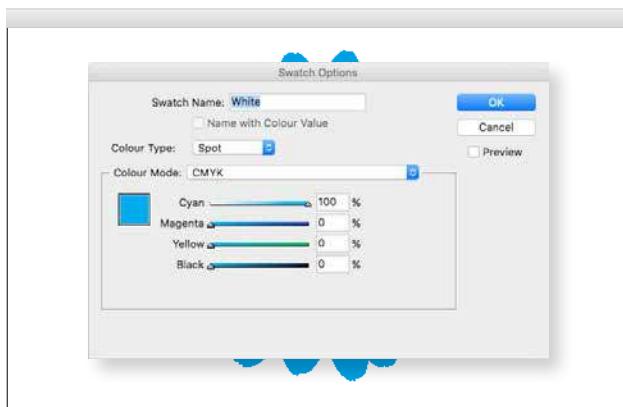
In the Swatches palette, designate Cyan as a Spot colour and rename it White (with a capital W).

Select your greyscale image with the hollow arrow tool and change the colour to White, which will show up as Cyan.

Note: It is important that you select the spot colour named White and not the Paper swatch which looks White. The White spot colour will show up as Cyan.
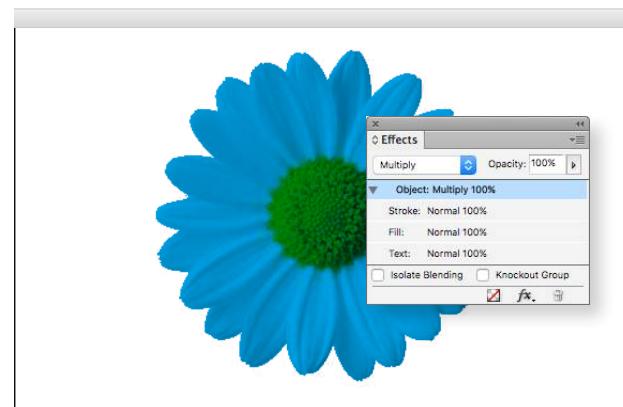
Select the CMYK layer in the layers window and then select all of the objects on that layer using the command Select All.

Open the Effects window and from the drop down menu, select Multiply.

You should now see a CMYK image which is multiplied with Cyan showing through from the layer underneath.

You can turn the layers on and off to check your images line up correctly and White ink has been allocated as intended.
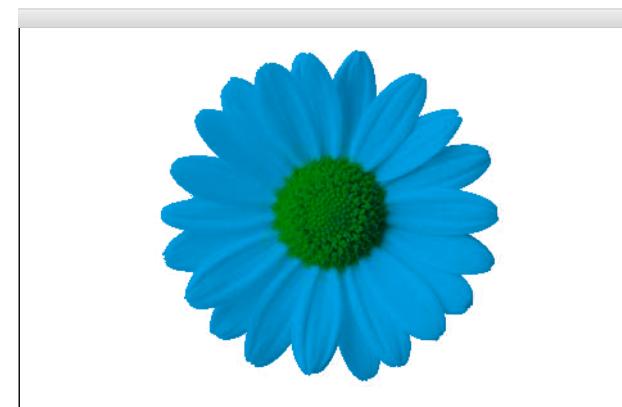
Save your file as a print ready PDF according to the instructions at the end of this guide.

How to apply metallic effects to photos and illustrations

Metallic underlays do not have to cover 100% of an image. Applying metallic ink to specific areas within an image creates better results.

You can create metallic effects for photos and illustrations by printing Silver (or Gold) underneath CMYK images – but it only works if the metallic ink is applied in the correct way.

Think of Silver ink like grey ink. Imagine printing grey ink underneath a colour image – it would make the colours look dark and muddy because it reduces the contrast and colour saturation of that image.

Metallic ink particles also make dark colours print lighter, so black becomes grey, further reducing the overall contrast of an image.

To get the best results, you must remove Silver from both the light areas and the dark areas of an image so contrast is retained. Silver can be applied to the midtones but is best applied sparingly. This allows the CMYK colours to remain vibrant.

Contrast and saturation should then be increased on the CMYK image to compensate for the desaturation effect created by the Silver.

Full details on how to setup artwork for metallic images are described in the following pages.

How to add a metallic effect
# to an image in Adobe Photoshop
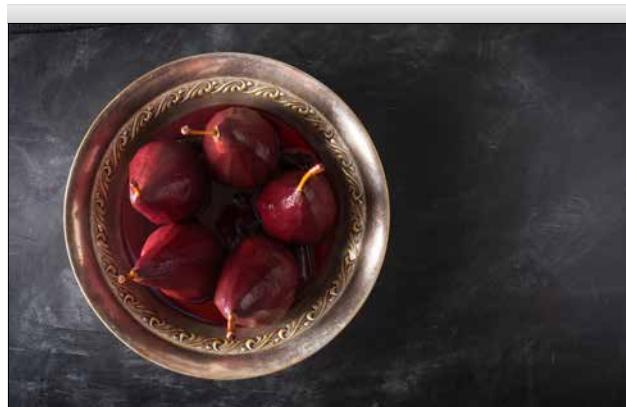
Open the file you want to add metallic ink to in Adobe Photoshop and convert the colour mode to CMYK.
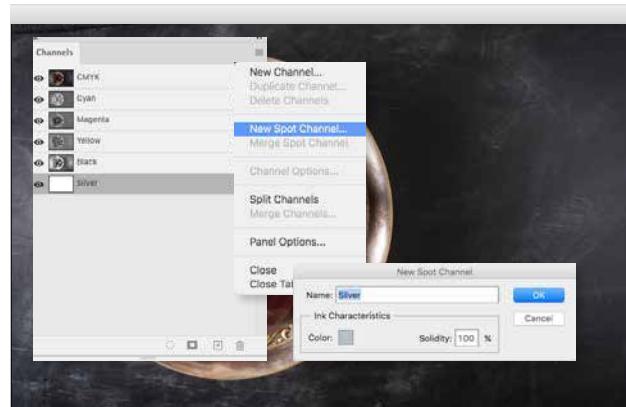
Open the Channels window and from the Channel drop down menu, select New Spot Channel and name it Silver (with a capital S).

While the pop up window is still open, change the colour to 20C 10M 10Y 10K then select OK.

Note: Colour values and Solidity entered here are for on-screen visual reference only. The grey colour you just made will be replaced with metallic Silver on the press.
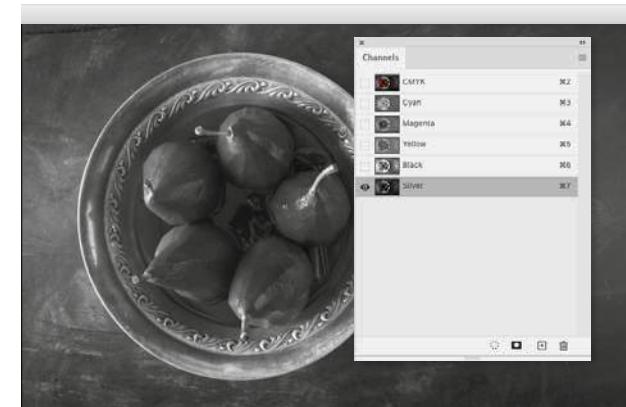
From the Channels window, select the CMYK channel and make a selection of the entire image using the command Select All.

Copy and paste the selected image into the Silver spot channel you created.

De-select the CMYK channel view and you should now see a mono version of your image.
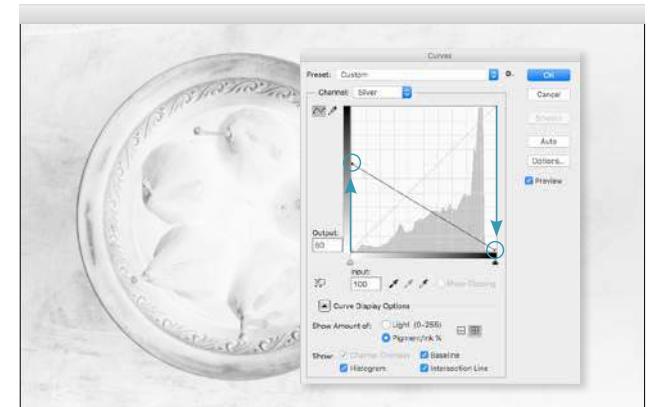
Open the Curves window, select the point in the bottom left corner of the graph and slide it up until the Output reaches 60.

Then select the point in the top right corner of the graph and slide it all the way to the very bottom.

You should now see an inverted image. This will be your Silver ink plate. Mask areas as required.

Select OK.

How to add a metallic effect
to an image in Adobe Photoshop
(continued)
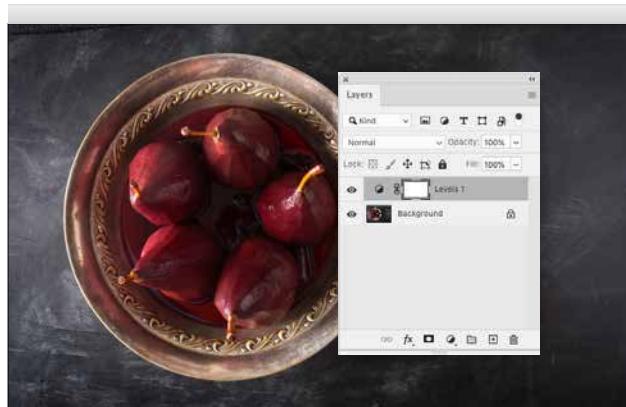
Turn on CMYK Channel visibility (your image preview may appear flat and muddy, this is normal).
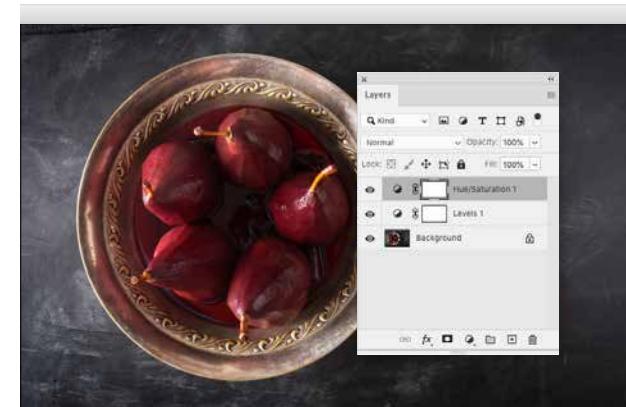
From the Layers window, create a new Levels Adjustment Layer.

In the Levels Properties window, slide the dark level indicator towards the centre until it reaches 30.

Then slide the light level indicator towards the centre until it reaches 225.

These values work well for many images but you might want more or less contrast depending on your image.

From the Layers window again, create a new Hue/Saturation Adjustment Layer.
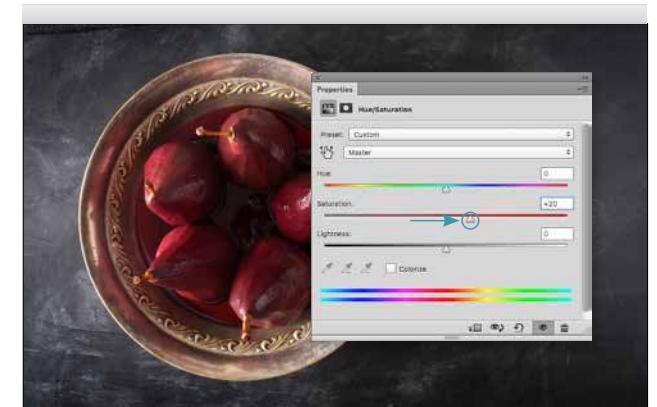
In the Hue Saturation Properties window, increase the Saturation to +20.

Your metallic image file is now complete.

Save as a PSD file so you can import to Adobe InDesign.

Using fluorescent Pink with your design

Fluorescent Pink brightens images, giving them more pop. There are several ways that fluorescent Pink can be applied to your files.

There are several ways that fluorescent Pink can be applied to your files.

One requires no input from the designer. The print operator can apply the Auto Pink Enhancement feature at the press to brighten the Magenta layer with fluorescent Pink giving images more pop.

Alternatively, an ICC profile for fluorescent Pink can be applied to RGB and CMYK images using Adobe Photoshop.

This method provides finer control and a more predictive result by analysing not only the magenta layer, but all layers which will improve a wider selection of colours.

Some PANTONE® colours will also benefit from the use of fluorescent Pink.

Revoria Flow™ will automatically apply fluorescent Pink to colours that will benefit from the available expanded colour gamut.

When PANTONE® spot colours are used, there is no need for the designer to take any further action, once Specialty Dry ink is enabled on the RIP.

Convert file from RGB to CMYK+Pink with ICC Profile
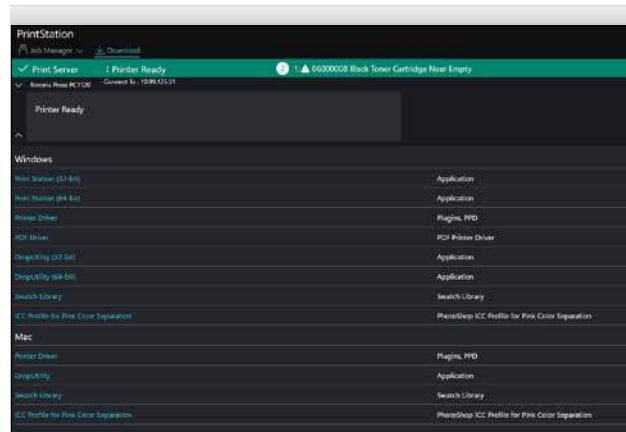
To add the ICC Profile to your computer, start the web browser, enter the IP address of Print Server in the address bar and press [Enter].

Click [Download] > [ICC Profile for Pink Separation].

Then install the ICC profile on your computer.

For Windows - Right-click the downloaded file and select [Expand All].

If necessary, change the target location in which to decompress the folder, and click [Expand].

Right-click "Revoria_Press_PC1120_CMYK_Pink.icc" in the decompressed folder, and select [Install Profile].

For Mac OS - Right-click the downloaded file and select [Open].

Copy "Revoria_Press_PC1120_CMYK_Pink.icc" in the opened folder to Library/colorsync/profiles.
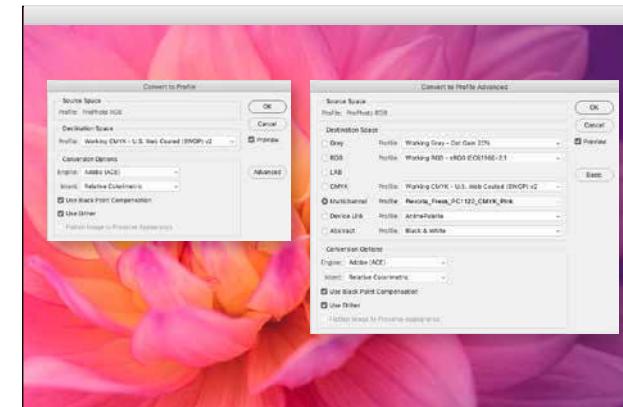
Start Photoshop CC, and open a RGB format image file.
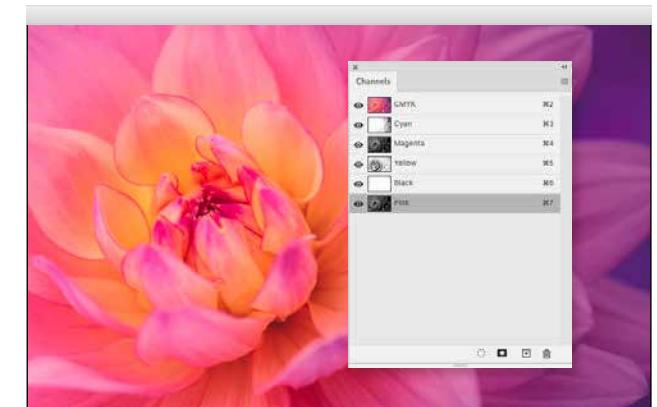
Click [Edit] > [Convert To Profile].

Click [Advanced].

Select [Multichannel].

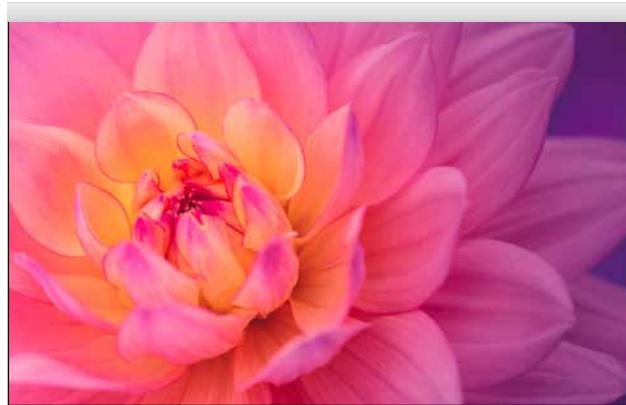Select [Revoria_Press_PC1120_CMYK_Pink.icc] in [Profile].

Click [OK].

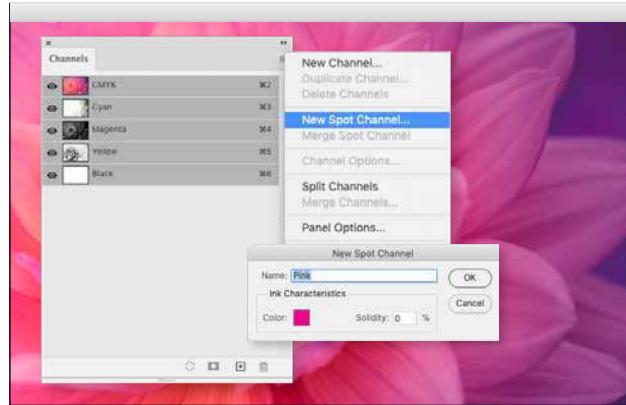Click [Image] > [Mode] > [CMYK colour].

Check the Pink plate by opening the Channels Panel.

Check that [Pink] is displayed.

Manually replace a Magenta channel with a Pink channel in Adobe Photoshop

Open the file you want to add Pink to in Adobe Photoshop and convert the colour mode to CMYK.
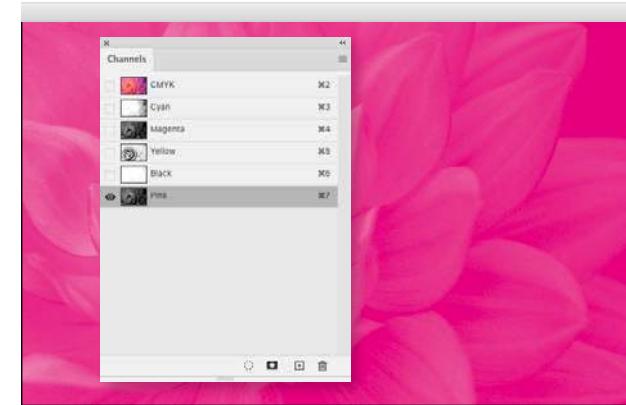

Open the Channels window and from the Channel drop down menu, select New Spot Channel and name it Pink (with a capital P).

While the pop up window is still open, change the colour to 100% Magenta then select OK.
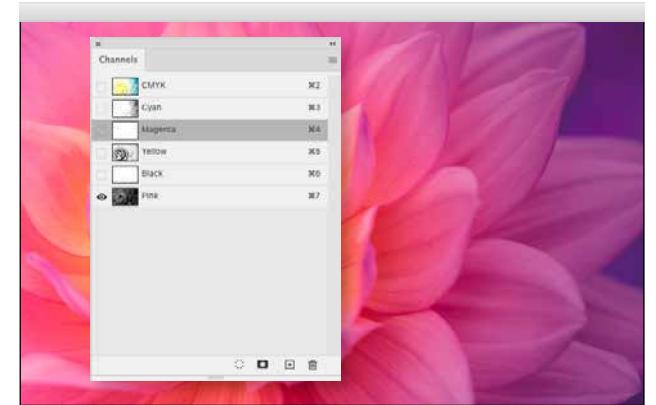
Note: Colour values and Solidity entered here are for on-screen visual reference only.
The Pink colour you just made will be replaced with a special Pink on the press.

From the Channels window, select the Magenta channel and make a selection of the entire image using the command Select All.

Copy and paste the selected image into the Pink spot channel you created.

From the Channels window, select the Magenta channel and make a selection of the entire image using the command Select All.

Fill with solid White (so there's no image).

Your file is now ready. The Pink spot channel will effectively replace the Magenta channel and your image will print brighter.

Note: Pink can also be added at the RIP through the user interface.

Exporting as a high-res PDF from Adobe InDesign

It's important to choose the correct settings when saving a PDF for printing with speciality inks. Follow these steps to create a PDF preset for saving high-res PDFs from Adobe InDesign.

1. From the main menu in Adobe InDesign, select: **File > Export**

2. Select your desired location, name your file using the naming convention Firstname_Lastname.pdf and set the Format to **Adobe PDF (Print)**

3. Click: **Save**

4. In the General attributes select Compatibility and choose: **Acrobat 8/9(PDF 1.7)**

   Check: **View PDF after Exporting** and **Create Acrobat Layers**

5. In the Compression attributes, select:
   Colour Images: **Do Not Downsample**
   Compression: **JPEG**
   Image Quality: **Maximum**
   Grayscale Images: As above
   Monochrome Images: **Do Not Downsample**
   Compression: **CCITT Group 4**

6. Marks and Bleed, check Crop Marks, Page Information and Use Document Bleed Settings

7. In the Output attributes, select:
   Colour > **No Conversion**
   Profile Inclusion Policy > **Include All RGB and Tagged Source CMYK Profiles**

8. In the Ink Manager attributes
   Uncheck: **All Spots to Process**
   Click: **OK**

9. Click: **Save Preset**
   and name your preset: **Adobe PDF HQ**

10. **Export** your PDF