PREFACE

Digital images made with a camera most probably will be in colour mode RGB. RGB stands for Red, Green and Blue. These are the primary colours of the visible light spectrum. By mixing the RGB colours in certain proportions almost any colour can be composed. Using RGB therefore is the best way to approach reality. Mixing RGB in equal amounts wil produce white light, as shown in figure 1.
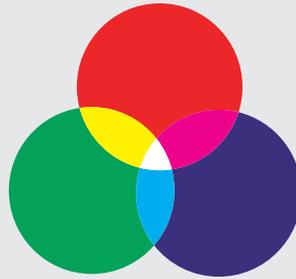

figure 1

For printing it's not possible to use RGB. Because paper is not a light source, a different way must be used to compose colours. This is established by filtering the light that is reflected by the white paper. By printing coloured ink on the surface certain wave lengths of the white light will be filtered. The colour that you observe is formed by the remaining wave lengths that can pass through the ink filter.
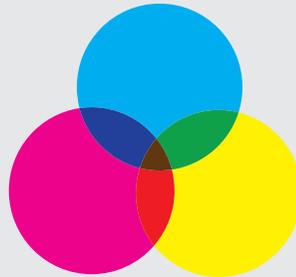

figure 2

The foregoing makes clear that there has to be a translation stroke made to convert the RGB colours of the image to corresponding CMYK colours for printing. External factors like the reflection or the whiteness of the paper type or of the ability of the paper type to absorbe inkt, determine how the conversion of RGB to CMYK should be done. Besides this the RGB colour mode is far bigger than the CMYK colour mode. The RGB colours that are outside of the range of the CMYK colours can't be reproduced accurately. By using the international standards for conversion of ICC this process can somewhat be controlled. The ICC profiles that are used for this process are in table form for each colour and it's counterpart in the other colour mode. Programs like Photoshop or InDesign can do these conversions for you.

COLOUR CONVERSION IN PHOTOSHOP

The best way to convert your images is with Photoshop. Within Photoshop the image is colour corrected and brightness and contrast adjusted if necessary. This should be done in the RGB mode, to prevent losing too much depth. When satisfied, the image can best be saved in RGB mode.

When converting the images to CMYK, it's important to use the correct ICC profile. If you are not sure which one to use, please contact your order manager. He or She can tell you which profile to use. You can also view the table on our website. https://www.emdejong.nl/en/file-delivery/colour-management/.

1   Install the profile(s) you need on your computer. Depending on the System do this in one of the following locations:
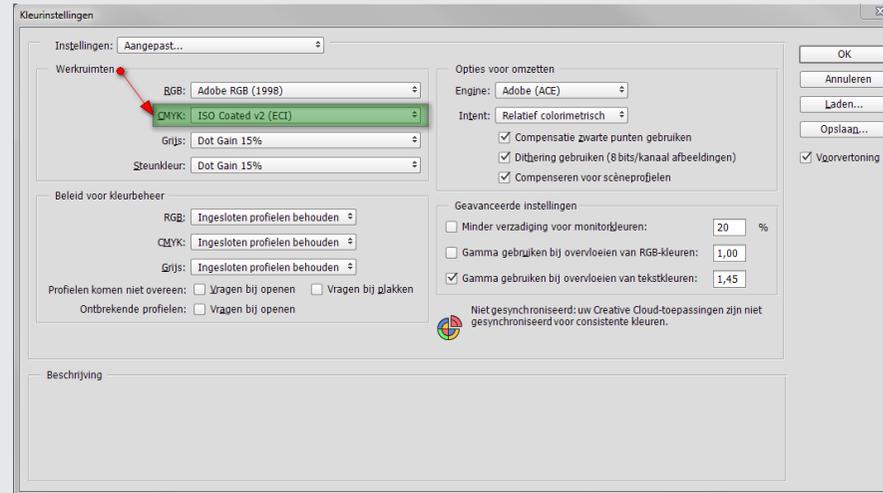
Windows   C:\Windows\system32\spool\drivers\color
MAC OS10   MacHD/bibliotheek/colorsync/profiles

2   Open Photoshop. Go to the menu Edit\Colorsettings.
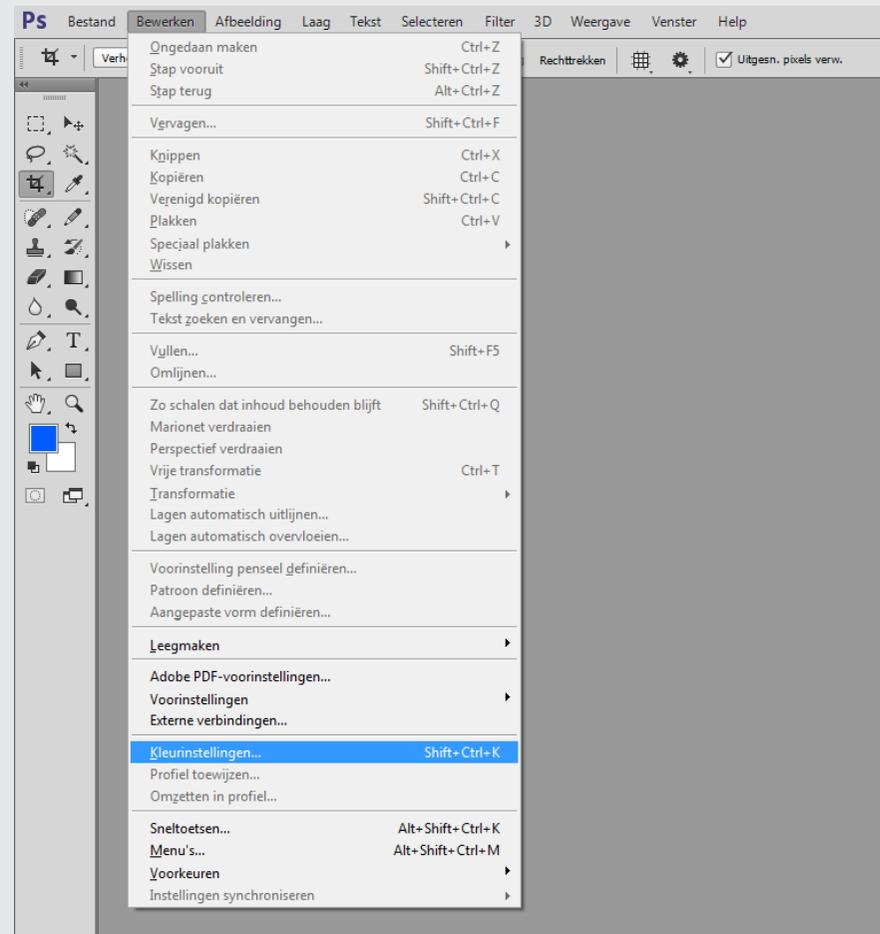
3   Select the correct ICC profile for your Job at workspaces\CMYK.

Warning! *With Mac OS9 Photoshop, a check mark should be turned on at Advanced mode, to be able to do this.*

4   After making the correct setting in the above screen, you can start corverting the images to CMYK.

5   Save the images including the used profile. Make sure to Save As, so that you don't overwrite the original RGB.
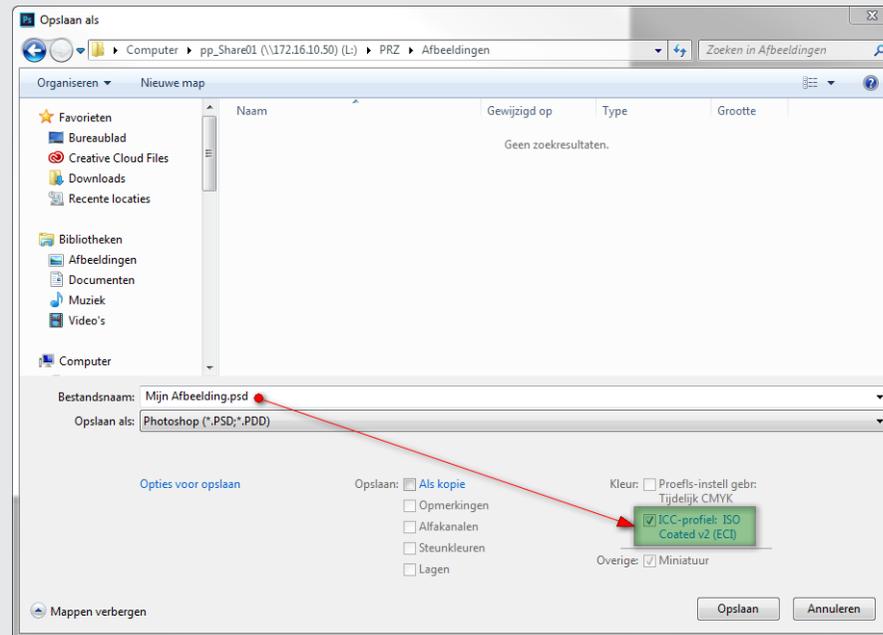
TIP: *Save the CMYK images with a name withwich you can recognise the used profile.*

COLOUR CONVERSION IN INDESIGN

Make sure to do the colour corrections within Photoshop, as well as brightness and contrast. Do this in RGB mode. When satisfied, save the image in RGB mode.

Use the RGB images in your InDesign document. When converting your InDesign document to PDF, make sure to use the correct export settings. When you are not sure which one to use, please contact your order manager. He or She can tell you which export setting to use. You can also view the table on our website at en/file-delivery/colour-management/.

1   Install the profile(s) you need on your computer. Depending on the System do this in one of the following locations:

Windows   C:\Windows\system32\spool\drivers\color
MAC OS10   MacHD/bibliotheek/colorsync/profiles

2   Download the job options from our website at https://www.emdejong.nl/en/file-delivery/colour-management/pdf-generation/. Use the download link PDF export settings InDesign. The zipfile contains joboptions and ICC profiles. Extract the zip on your desktop.
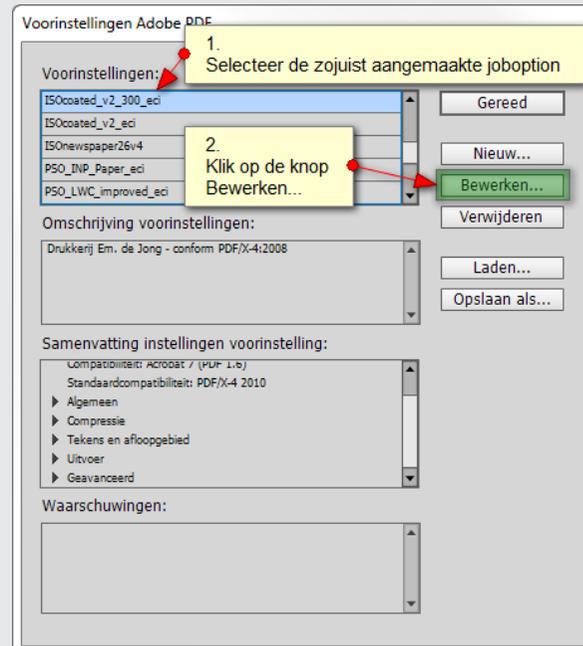
**3**   Open InDesign. Go to the menu File\Presets Adobe PDF\Define…
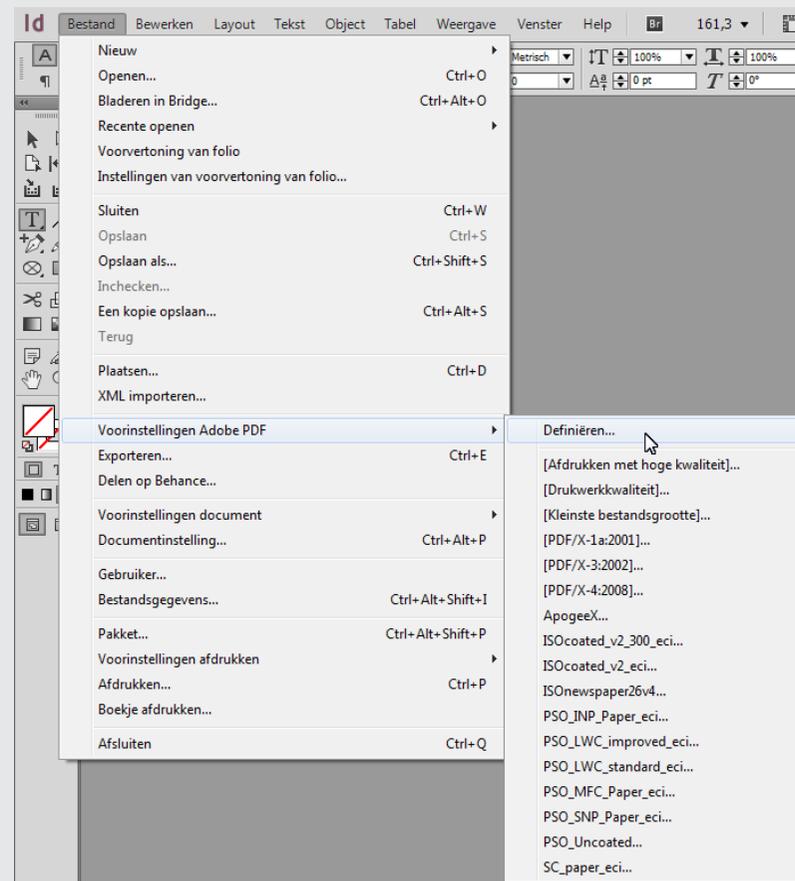
4   Click the Load button... and browse to the extracted folder on your destop. Select the job option you need and click the Open button. The job option will be added to you list of presets.
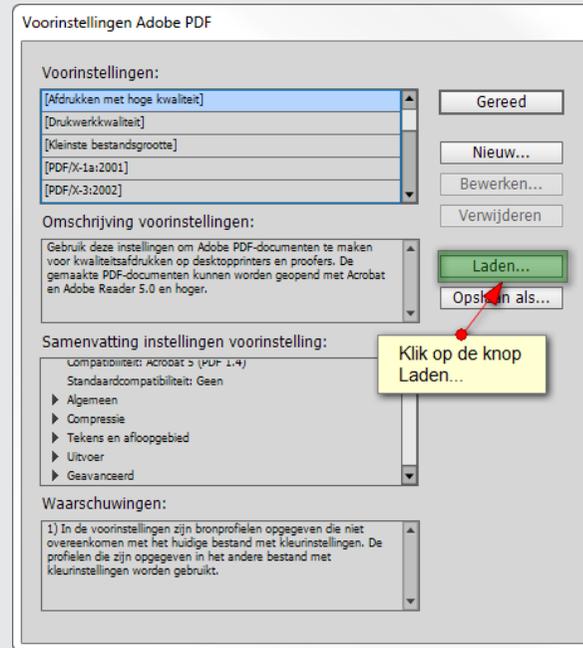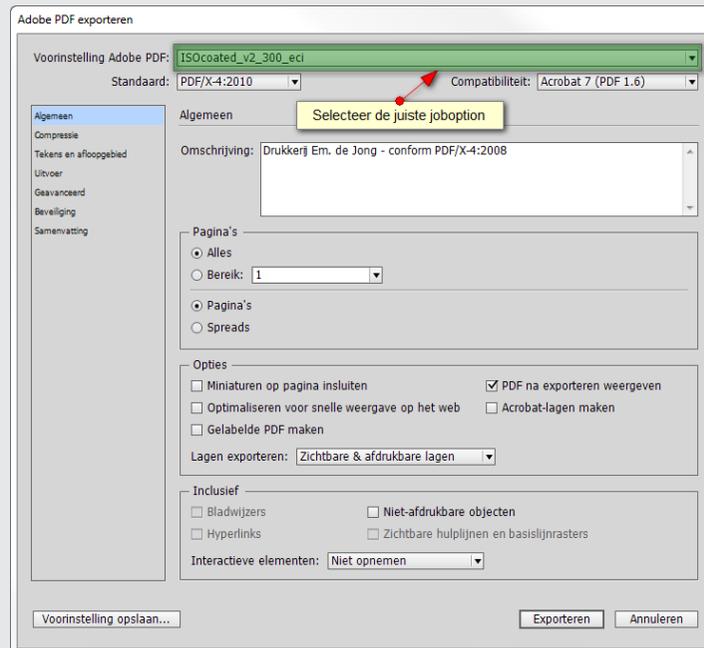

5   Check if the correct ICC profile is linked. Do this by selecting the imported joboption from the list and clicking Edit.

6   View the Output tab and check the target.
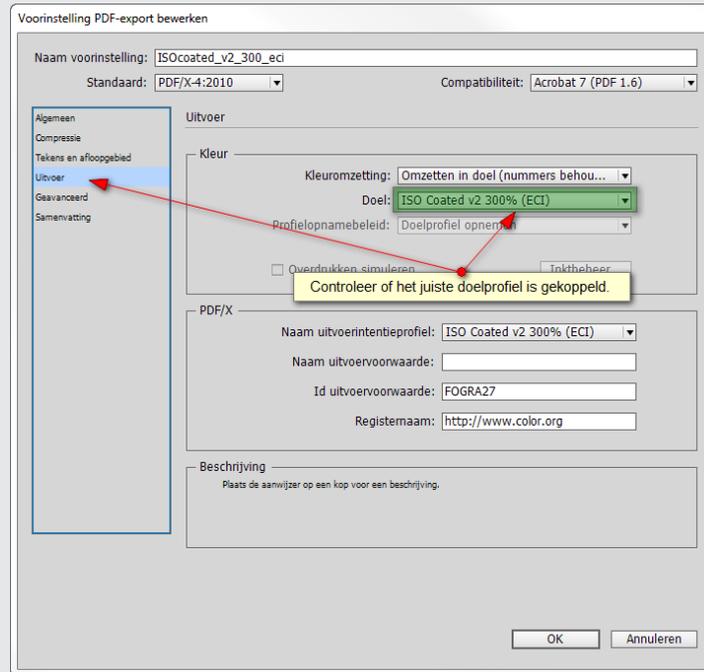
7   When everything is OK you can use this preset when exporting to PDF.

Beware!
- *The preset will only effect images and colours in your document in the RGB or LAB mode. All CMYK values will be untouched.*

- *The preset in the example is only meant to use for printing jobs with the ISOcoated_v2_300 norm. For other ICC norms use the corresponding ICC profiles en InDesign presets.*

- *Although converting with InDesign is the easiest way, and also preventing your image databank becoming larger with all the converted versions of an image, you miss the control that Photoshop gives you on the result. Best practice therefor is making colour proofs of your job.*

COLOUR **MANAGEMENT**
BASIC INSTRUCTION   *VERSION 1 - JAN.2015*

SUPPORT

Please contact your order manager for more information