UCR  GCR

- Time saving  
- Efficiency  
- Better margin

These acronyms are becoming more and more relevant for printers particularly with customers wanting jobs with a quick turnaround and on an environmentally friendly uncoated paper.

We all know how this can raise issues, particularly with the fashion for designers to choose lots of dark areas with significant ink coverage. UCR and GCR are old but traditional methods coming back to the fore helping us print, finish and deliver a job efficiently.

**Under Colour Removal** (UCR) is the technique of reducing the cyan, magenta and yellow ink in the darkest neutral areas of the image reproduction and replacing them with a controlled amount of black. The image reproduction will appear normal but will use less ink, the shadows will have more detail, and trapping will be improved.

**In grey component replacement** (GCR), contrary to under colour removal (UCR), the CMY values that add to grey all along the tone scale can be replaced with black ink. UCR only adds black to the CMY equivalent of what would have printed as a grey or near-grey.

**Benefits:**
- Less stress on the paper as it travels through the press helping it to run at higher speed.
- Speed of drying, enabling it to be finished quicker.
- Less ink being used.

For Heidelberg, and their customers, being able to run their press and post press equipment as efficiently as possible is paramount. The ability to use UCR and GCR in their prepress workflow (Prinect PrePress Manager) is therefore a standard feature. Everyone who has Prinect PrePress Manager already has the ability, should they choose, to be able to use these features with the resultant benefits.

The example shows typically the effects before and after having UCR applied on the total ink limit.

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Original image showing, in green, the areas with a total ink coverage which exceeds 320% and inset after applying UCR to the page.
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Changed image showing, in green, the areas with a total ink coverage which now exceeds 260%.
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For more information on how to use this feature contact Heidelberg or email: neil.hathaway@heidelberg.com