

Tips & Tricks

AVOIDING GRADIENT FLAWS, PART I:

Remedying Incorrect Settings on a CtP System

The overall appearance of advertising brochures for cosmetics, cars and clothes must meet the very highest standards of quality. One of the central criteria involved in this is uniform and flawless printing of color ramps, such as those occurring in light and shadow effects on faces and car bodies. Any noticeable flaw in terms of outlining, banding or color shift in these items is immediately deemed unacceptable both by the end user and by the client for the printed product. This means that, for both a prepress provider and the prepress section in a print shop, quality assurance for plate imaging and development is absolutely essential. In this respect, suitable control measures and test charts should already be in place before such important and critical print jobs are taken on.

Improperly Calibrated Imaging Equipment

There are many causes of gradient flaws. For this reason, print sheets, the printing plate and the data set to be used should first be checked for any evident defects. If flaws are already evident on the printing plate, but not in the data set or in the ripped data, then the plate imaging and development process will have to be examined to find the possible causes.

If errors are occurring during imaging, there are two possible causes. Firstly, the settings on the imaging unit may have shifted slightly or the unit may be dirty. In this case the CtP system will require servicing. Secondly, the problems may be caused by poorly calibrated linearization and color tone correction curves.

Prevention by Proper Adjustment

It is precisely for sensitive print jobs that the Fogra CtP test chart can represent a good option when it comes to quality assurance. This test chart is used to check printing plates for correct imaging settings by comparing them to a reference plate.

Basically, quality can be ensured with the Fogra CtP test chart in a few very simple steps. First of all, the CtP test chart reference templates are created and archived at a time when the CtP system has been optimally adjusted (after installation or maintenance, for instance, once the subsequent approval has been given for

production). To do so, the PDF file of the CtP test chart is imaged directly (by direct download, for instance, or by printing from Acrobat Distiller). In the case of a PostScript (PS)-based workflow, the CtP test chart is delivered as a PS file. The test chart should not be output via application programs since these might corrupt the output result. In addition, no linearization or color tone correction curves should be used on output. This is the method of executing and obtaining documentation of a performance test of the CtP system that involves the least possible error.

Later on, possibly during a weekly quality control inspection, a plate with the CtP test chart is created using the same delivery method and the imaging result obtained is examined for non-conformities by comparing it to the available reference plates. If the gradient problems are due to an incorrectly adjusted imager, then the main focus of the inspection should then be directed towards the linear and two-dimensional gradient swatches, as well as the resolution-related checkered areas of the CtP test chart. If nonconformities and flaws are noticeable, it is highly likely that the imaging unit needs adjusting. ■

Facts & Figures

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Ordering the Fogra CtP Test Chart

The Fogra CtP test chart can be ordered directly from Fogra (Magdalene Glatz; Tel. +49-(0)89-43182-160 or email: Glatz@fogra.org) or via the online store (www.fogra.org).