Control Device

FOGRA
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Ugra/FOGRA Digital Plate Wedge

Like all complex systems, digital plate setters, also known as computer to plate systems, require suitable control aids in order to monitor output quality during daily production and to be able to guarantee production standards. The complexity of computer to plate systems is apparent in the large number of components involved in the process. The combination of digital data from various different application programs, with various different RIP and output device parameters, different types of plate and development conditions for plates as well as printing requirements for the transfer of tonal values place high demands on the control of the work as it progresses.

After extensive test exposures and practical investigations a plate control strip that is suitable for use in production was developed. It is a further development of the Ugra/FOGRA-PostScript Control Strip. This is the standard tool for PostScript capable output devices and continues to be important as a control aid for film exposure and for digital work flow.

The Ugra/FOGRA Digital Plate Control Wedge is arranged as a total of 6 functional groups or control panels:

- Information panel
- Resolution panel
- Geometrical diagnostics panels
- Chequered panels
- Visual reference steps (VRS)
- Progress wedge

The 11 visual reference steps are a new feature. In this group a chequered panel is surrounded by a reference panel, and the dot percentage increases in 5 % steps from 35 % to 85 %. Under theoretically ideal conditions and if the transfer characteristics are linear then when the two panels have a dot percentage of 50 % they should blend with each other, i.e. the impression of brightness and the measurable tonal value should give a dot percentage of 50 % in both areas . Due to the plate type, exposure calibration, developer and transfer characteristics this is hardly ever actually achieved under operational conditions, and shifts upwards or downwards occur. The VRS panels that are important for day to day production are those that enable the optimum setting to be chosen and output results to be achieved. Deviations from the appearance of the VRS panels that is ideal for the production process can be identified by a visual check. Other panels provide information about resolution as well as the progress wedge, with which the tonal value transfer can be checked. In order to eliminate production dependent differences in plate materials, zero points are located between the rows of halftone panels. Consequently the position for the densitometric measurement of zero (substrate only) and the dot percentage lie beside each other.

The resolution panel contains two semicircular panels. In the first panel positive lines radiate out from a point and in the second the lines are negative. The thickness of the rays corresponds to the theoretical resolution of the output device.

The geometrical diagnostics panels also contain lines that are oriented to the particular resolution setting of the output device. The chequered panels are below the geometrical diagnostics panel. Labels are positioned over each of the panels and the sides of the squares are one, two and four units long.

Price:

On request
(see: Online Shop at www.fogra.org)
FOGRA members receive a 25 % discount.

Anyone who is interested should contact:

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