Fogra characterization data for heat set printing on improved newsprint stock and offset printing with additional surface finishing:

FOGRA48, FOGRA49, FOGRA50

The new printing condition FOGRA48 and the associated ICC profile “PSO INP Paper (ECI)” for heatset web offset printing on improved newsprint are based on a test print series conducted by the ECI web offset working group (WOWG). Several European web offset printers contributed print samples on typical improved newsprint papers. Upfront the working group had agreed upon aim values for the solid coloration and the tone value increase (TVI) of the printing inks cyan, magenta, yellow and black. As for all other offset profiles provided by the ECI, the aim values for the TVI are taken from the international standard ISO 12647-2:2004. For the dot gain of cyan, magenta and yellow curve C (19%) applies, and curve D (22%) for black, measured in a 40% patch of a control strip. With the new profile the ECI completes the range of standard profiles for web offset papers.

Usage in practice (pre-press)

A colour-accurate proof or softproof using e.g. FOGRA49 represents the expected result of a standardized offset print on coated paper (FOGRA39) with subsequent matte film lamination. By comparing FOGRA39-based proofs with FOGRA49 or FOGRA50, it is easy to check whether undesired colour changes must be expected (so that job data may need readjustment). For more details please refer to the documentation on the ECI web page.

Usage in practice (printer)

As before, the printer must measure and achieve his established aim values for standardized printing on the un laminated print (paper type 1/2, 60–80 lines/cm, TVI curve A for CMY (13%) and B (16%) for black). Production-based differences to FOGRA39 in paper white, solid coloration, and tone value increase are carried forward by lamination. Therefore it is not meaningful to use measurements on laminated prints for process control.
Usage in practice (surface finisher)

Colour changes during lamination depend only on the materials. Glossy films are very similar, but matte films can have quite different values of haze / opacity. The average matte film given by FOGRA49 leads to a lightness increase of $\Delta L^* = 6$ in the solid black patch and is well suited for typical production. A clearer film will cause less lightening; a matter film will cause more. Therefore, individual film types can be classified by measuring solid black before and after lamination (on the same patch on the very same sheet, before and after).

For detailed information on the new printing conditions see table below.

Download: www.fogra.org/en/fogra-standardization/fogra-characterizationdata

<table>
<thead>
<tr>
<th>Description</th>
<th>Substrate</th>
<th>Internal profile name (<a href="http://www.eci.org">www.eci.org</a>)</th>
<th>Screening</th>
<th>Backing</th>
<th>TVI-curve</th>
<th>Additional surface finishing</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOGRA48</td>
<td>Web offset printing (heatset)</td>
<td>Improved newsprint (INP)</td>
<td>PSO_INP_Paper_eci.icc</td>
<td>According to 60/cm</td>
<td>white</td>
<td>C (CMY) and D (K)</td>
</tr>
<tr>
<td>FOGRA49</td>
<td>Offset printing sheet-fed</td>
<td>Coated paper (Paper type 1/2)</td>
<td>PSO_Coated_v2_300_Matte_laminate_eci.icc</td>
<td>According to 60/cm - 80/cm</td>
<td>white</td>
<td>A (CMY) and B (K)</td>
</tr>
<tr>
<td>FOGRA50</td>
<td>Offset printing sheet-fed</td>
<td>Coated paper (Paper type 1/2)</td>
<td>PSO_Coated_v2_300_Glossy_laminate_eci.icc</td>
<td>According to 60/cm - 80/cm</td>
<td>white</td>
<td>A (CMY) and B (K)</td>
</tr>
</tbody>
</table>

Table: Detailed information on the printing conditions FOGRA48, FOGRA49 and FOGRA50.

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Imprint

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