



The image shows the MPG Testchart 3.0 with seven numbered callout boxes on the left side, each pointing to a specific feature of the testchart:

1. Check the positive/negative hairlines for balanced appearance
2. Positive/negative characters and halftone image to check the printed results
3. Different checkerboards for a rough check of the correct exposure
4. Stepwedge to calibrate the tints
5. Platecheck as indikator for density changes of the plate
6. Graduated tint 0-100%
7. Colour bar for checking the density of the print

The testchart itself includes the following elements:

- Mitsubishi Paper Mills Limited logo and 'MPG Testchart 3.0' title.
- Resolution: 1200dpi/HalftoneType1 60 lpi/ 45 deg/ Euclidean.
- Resolution test patterns: 1x1, 2x2, 4x4, 6x6.
- Text: '7p MITSUBISHI PAPER Silver Digiplate System' repeated.
- Resolution test patterns: 10-20-30-40-50-60-70.
- Stepwedge with density values: 0, 2, 4, 6, 8, 10, 15, 20, 30, 40, 45, 50, 55, 60, 70, 80, 85, 90, 92, 94, 96, 98, 100.
- Platecheck patterns: 0.02pt, 0.05pt, 0.10pt, 0.20pt.
- Graduated tint bar.
- Form fields: Customer, Machine, Lasersetting, Date.
- Colour bar with density values: 0.02, 0.04, 0.06, 0.08, 0.10, 0.12, 0.14, 0.16, 0.18, 0.20, 0.22, 0.24, 0.26, 0.28, 0.30, 0.32, 0.34, 0.36, 0.38, 0.40, 0.42, 0.44, 0.46, 0.48, 0.50, 0.52, 0.54, 0.56, 0.58, 0.60, 0.62, 0.64, 0.66, 0.68, 0.70, 0.72, 0.74, 0.76, 0.78, 0.80, 0.82, 0.84, 0.86, 0.88, 0.90, 0.92, 0.94, 0.96, 0.98, 1.00.

If the testchart is exposed as a PostScript file, information on resolution, screen ruling and date will be correctly shown on the plate.

After a conversion into the PDF format and later exposure, this information refers to the condition when the PDF was created.

This Page contains some coloured elements, but only the black plate is necessary. Therefore it should be exposed without In-RIP-separation.

For detailed information on the application of Silver-Digiplate please refer to our "Brief Guide for Silver-Digiplate Start-up"

## Details

### 1. Positive / Negative Hairlines

These fields are distributed over the complete testchart and help to check the imagesetters resolution capabilities. When output with a low resolution the thinnest lines do not appear in the correct width, means they are thicker than mentioned. The black and silver lines should be as equal as possible.

Weak silver lines show overexposure and weak black lines show underexposure. Different appearance of the thin lines when output at 90° is possible due to the different scanning direction of the laser.

### 2. Positive / Negative Characters

Should neither fill-up nor lose the fine details.

### 3. Checkerboards

Depending on resolution and capabilities of the platesetter different to judge. In general, an overexposure is obvious when the density of the two center fields differ significantly.

### 4. Stepwedge

Helps to calibrate the halftone dots. To achieve exact results only the printed paper should be measured to include the dot gain of the press. Then a correction of the dot gain can be performed according the customers targets.

Measure the stepwedge and write the results into the free fields below it. The numbers in "Target" refer to the Fogra recommendation for black, 150 lines per inch and paper class 1. The field "Correction" can be used to fill in the ascertained correction value for the RIP.

### 5. Platecheck

This image is available as a separate file on our website together with a detailed explanation file.

### 6. Graduated Tint 0-100%

Should be as even as possible after calibration. Depending on the relationship between resolution and screen width more or less steps might be visible. This is a normal behaviour and not a lack of quality of the Silver-Digiplate.

### 7. Colour Bar

To measure the density of the printed result. Especially during calibration of the halftone dots it is essential to compare the uncalibrated and the calibrated results under the same conditions.