X!Tend Software

More precision through targeted compensation of process-related deviations

Purpose

The goal is for the finished printing plate and the subsequent print result to match the original template as closely as possible.

Main functions

X!Tend was developed to take process-related changes into account already in the exposure data.

Compensation of detail loss during imaging

During the imaging and processing stages, system-related detail losses can occur. Causes include light reflections, light scattering, and effects related to the curing of the emulsion. As a result, fine structures, lines, and openings on the finished printing plate may differ from the original template.

X!Tend specifically compensates for these effects by deliberately adjusting critical image elements such as line widths and openings. This creates a preventive compensation so that not only the data template, but above all the finished printing plate, corresponds as closely as possible to the original.

Geometric correction in the X and Y directions

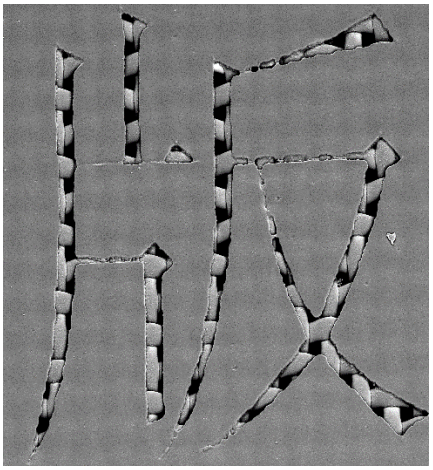
X!Tend also enables targeted adjustment of data along the X and Y axes. Process-related distortions or dimensional deviations that may occur in the final print can thus be compensated in advance.

The source file is modified in such a way that the final printed image once again matches the specified dimensions. This is particularly important in applications where the highest level of registration accuracy and dimensional precision is required.

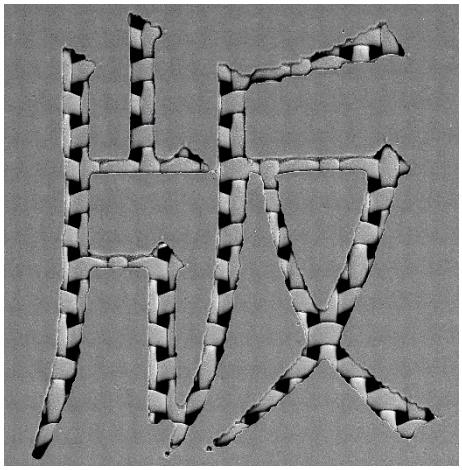
Compensation of arc-shaped distortions

In addition to linear correction in the X and Y directions, X!Tend also allows compensation of arc-shaped distortions that may occur during printing. Such effects can arise when the printed image shows deformation in the center of the stencil compared to the outer areas.

The software makes it possible to specifically compensate for these arc-like deviations in both positive and negative directions. This ensures that even more complex, non-linear deformations can be taken into account in the imaging data and corrected in the final print result.



5 dot text imaged without X!Tend



with X!Tend - emulsion for high-end graphics

Main benefits

- Compensation of system-related detail loss already before imaging
- More precise reproduction of fine structures and critical image elements
- Geometric correction in X, Y, and arc-shaped distortions
- Higher consistency between original template, printing plate, and print result
- No impact on productivity, as processing takes place during imaging