

Tips & Tricks

Printing with Polyester Printing Plates (Part II): Profitable Use on Heidelberg Printing Presses

Polyester printing plates offer a cost-effective alternative to metal printing plates. In particular, they offer several advantages to commercial print shops with short run lengths of up to 20,000 copies, such as shorter throughput times and lower production costs (see Tips & Tricks, HN 256). Companies that use polyester printing plates on Heidelberg printing presses also profit from a variety of high-performance options that increase ease of operations and improve profitability. The AutoPlate setup is one example. You can use it to clamp the plates in the blink of an eye.

Polyester Printing Plates & AutoPlate

For perfect printing results, the press must always be kept clean and maintained carefully. Polyester printing plates demand special consideration:

- We recommend manual output with polyester or paper-based printing foils with a thickness of less than 0.15 mm (0.006 inch).
- Perform register corrections only after a few waste sheets, especially when print jobs extend across the entire print area.
- For critical print motifs, first adjust the forward third of the printing plate.
- After each register correction, print about 30 sheets to stabilize the polyester printing plate and minimize register irregularities.

Treatment with Special Solutions

- Manufacturers of polyester printing plates offer dampening solution additives. Check with your contact at Heidelberg to see which one is ideal for your requirements.
- Before the start of production, you can treat polyester printing plates with etching solution to accelerate the freewheeling of the printing plate and achieve the ink-water balance at the start of printing. Follow the solution manufacturer's directions.

Polyester Printing Plates & Printmaster QM 46

- We recommend using polyester printing plates with a rough reverse side because they guarantee secure handling for plate clamping and the diagonal setting. They also ensure the dimensional accuracy of the polyester printing plate.
- After clamping, dampen the polyester printing plate using the dampening system.
- Include a predampening interval whenever printing is interrupted by dampening the plate a few times to prevent the plate from smearing. You can use the control panel to set a higher predampening level for the polyester printing plate quickly and easily.

Polyester Printing Plates & Printmaster GTO 52

- Tighten the clamping nuts only by hand. Hand tightening avoids overexpansion of the polyester printing plate and ensures a good register from the very start.
- Adjust the inking unit according to the instruction manual and set the inking form rollers to the polyester printing plate more acutely than indicated.
- During the production run, you should work with a large ink fountain roller sweep with a minimal ink zone opening. ■

Facts & Figures

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