Non-Process and Chemical Free Offset Printing Plate

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Available at: https://works.bepress.com/bilge-nazli-altay/6/
There is no need to purchase any device except CTP machine to switch to non-process plate. The only issue remaining unchanged is both methods use chemicals in plate preparation process. A manufacturer can set 8 m² plate with 1 kg chemistry but B manufacturer can use a different amount. The only issue remaining unchanged is both methods use chemicals in plate preparation process.

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Non-process, non-chemical plate technique of the sector has provided great facility for applications in presses. Thus, the exposed plate is handled for up to four hours in the press works, a good quality print is achieved after 9-15 standard sheet printing operations.

Additional advantages for workers health and the environment can be achieved by using of chemical free plates. Giving no harm to workers’ health can be considered an additional advantage.

Conclusion:
The damage given to environment by conventional printing plate preparation methods can be only prevented by using of chemical free plates. Giving no harm to workers’ health can be considered an additional advantage.

Technical specifications:
- Plate: Negative working thermal digital plate
- Application: Short/medium run sheetfed applications
- Plate colour: Medium blue/grey
- Image contrast: Medium blue grey — for visual identification only, not suitable for densitometer measurements.
- Plate colour: Pale blue/grey
- Gauge: 0.14mm, 0.20mm and 0.30mm
- Latent image stability: Under dark storage conditions, the imaged plate may be kept up to 2 weeks prior to going on press.
- Maximum short grain width: 1050mm
- Spectral sensitivity: 800 – 850nm
- Platesetter compatibility: Recommended Kodak Thermalsetter, Kodak Letem and Kodak Magnus platesetters
- Other accredited platesetters: Screen PT-R platesetter range, Heidelberg Topsetter and Suprasetter platesetter range and Luscher Xpose! platesetter range
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- Laser energy required: 325 mJ/cm²
- Resolution: 11 to 600, 2010 psi
- Finish: 25 micron stochastic
- Run length: 100,000 impressions
- Shelf life: 18 months

Bibliography:
2- Prof. Dr. Ing. Rebi Rost, Neumann, Teubner. "Technologie des Offsetdruck", Leipzig, Germany
3- Kodak Thermalsetter. Kodak Thermalsetter, Kodak Letem and Kodak Magnus platesetters
4- Other accredited platesetters: Screen PT-R platesetter range, Heidelberg Topsetter and Suprasetter platesetter range and Luscher Xpose! platesetter range
5- Laser energy written the image to the ultra-thin coating. Coating in the images areas becomes non-soluble.
6- The plate is then mounted directly on press.
7- Dampening rollers are engaged.
8- Then ink rollers are engaged and the plate is covered with ink.
9- The fountain solution plus the ink tack ensure that the dissolving coating is transferred to the blanket, and so to the first few sheets.
10- Paper feed is engaged and the first few sheets remove the non-image coating.
11- Within a few sheets the background is clear and ink is at density.