

## How to choose the right CtP technology provider? The checklist

1.	Does the CtP platesetter working area correspond to the printing press?	Mismatching results in needless waste. Check how many print patterns you can expose on one plate given the CtP machine working area. How much waste do you expect? You can always expose on parts of the laser working area. In this case make sure the laser does not slow down while exposing smaller fragments of the photopolymer plate. If it does, you can forget about the normal speed you expected from the machine. Alternatively you can check if your plate provider could deliver plate formats customized to your needs.
2.	Does the CtP platesetter working area correspond to the UVA exposure unit?	Mismatching results in needless waste. Take into account the working area of the UVA exposure unit. An undersized laser relative to the exposure unit slows the process down. An outsized laser relative the UVA exposure unit creates the need to cut the plate before washout. This is time-consuming and creates ample possibility for error and waste.
3.	Does the laser speed (in m <sup>2</sup> /h) correspond to your photopolymer plate usage? Did you take your business development plans into account?	Mismatching will cause bottlenecks in the prepress department. Check that the laser does not slow down while exposing incomplete formats. For example, if the laser working area is 635x762mm it should work at the nominal speed of 2m <sup>2</sup> /h for 15 min. But let's say you want to expose 317x762mm. How long will it take? The whole process is as fast as the slowest device in the process.



4.	What laser resolution do you need?	Resolution translates into the number of pixels that make up the halftone. For example, at 2540 dpi resolution the 2% dot for 175 lpi /70/lcm screen is made up of 10 pixels. At 4000 dpi resolution the dot is made up of 30 pixels. The number of pixels impacts the structure of the halftone, color reproduction and text sharpness. The lowest resolution is 2540 dpi. 4000 dpi is currently the standard in flexoprinting technology. There are resolutions higher than 4800 dpi but the visible increase in quality does not justify the investment costs.
5.	Does the machine come with the CtP prepress software? What screening options does it offer?	Good CtP prepress software should include a rich library of screening options. They make it possible to flexibly adapt to the needs of the end client, come close to offset printing quality or adjust the dot to the plate or substrate and get the best possible print quality. Screen options should include: Euclidean Round, Rhomb, Ellipse, Diamond, Pure Round, Sharp Ellipse, Square, Cross, Hybrid.
6.	What are the costs of updating and upgrading the CtP prepress software?	It often happens that when the CtP platesetter is sold at an attractive price, the technology provider will charge extra for software updates. Updates are necessary to fix bugs, improve efficiency, improve workflow or add functionality. It is best when they are free.
7.	Is the CtP platesetter equipped with autofocus?	CtP laser's job is to burn off in precisely defined places the carbon film on the CtP plate. Plates have varying thickness tolerance. If the laser focus is not



		automatic during the exposure process, plate exposure may be inconsistent or incomplete, which will result in the poorer quality of plate making. The dots may be weakened or incompletely reproduced on the printing matrix. This is likely to affect ink transfer.
8.	What is the maximum plate thickness the CtP laser can handle?	0,80 to 2,84 mm is the industry standard.
9.	What is the cost of laser head replacement?	The optical head is the heart of the CtP machine and its most expensive part. Any failure after the warranty period or in an out-of-warranty situation may result in thousands of euros of replacement costs.
10.	What is the warranty period?	2 years is doable. This gives you complete peace of mind in case something happens.
11.	How much time will the technology provider need to respond to machine failures?	A common solution now is that the machine producer / provider connects to the CtP machine over the internet and solves the problems remotely. For greatest peace of mind, ensure quick response times and easy access to specialists.
12.	Does the technology provider have experience in the industry? Can it provide quality professional support and advice?	It is really important for the CtP technology provider to understand your business needs and unique industry characteristics. Understanding technology is important too. Choose a reliable and experienced partner capable of providing quality products and services.

