



## Conventional Lithographic Printing vs Waterless Printing

### Alcohol

A major environmental benefit of waterless printing is the fact that there is no alcohol involved in the process. Alcohol releases volatile organic compounds (VOC's) into the atmosphere which contributes to photochemical smog and thus the greenhouse effect.

Unlike conventional lithographic printers ecoDesign ecoPrint have completely eliminated the use of alcohol from our production methods and so offer the same benefits as waterless printers..

### Water usage

Waterless printing eliminates the use of water from the printing process. The difference in water usage between the two printing methods is negligible. ecoDesign ecoPrint's 4 colour 28 inch press has a 30 litre water tank capacity which is changed once a week. The water used on the press is recirculated all the time — i.e. the water usage involves a closed-loop system. During the week we may top up the tank once or twice with an additional 10 litres so total usage of water is a maximum of 40 litres per week. To put this in perspective:

- a single toilet flush – up to 18 litres
- showering – 5.7 to 18.9 litres per minute
- bathtub – 115 to 190 litres (full bath)
- washing machine – 170 to 190 litres per cycle
- dripping tap (very slight drip) – 30 litres per day

### Paper

Waterless printing claims a 40% reduction in make ready waste paper. This claim assumes that conventional printing throws away (recycles) the make ready waste paper for each job. In ecoDesign ecoPrint's production process we reuse the make ready waste sheets for job after job after job. Hence if the 40% figure is correct then this would only apply to the first job, we would then reuse the make ready waste from the previous job on the next job meaning there is only a fraction of the waste required compared to the previous run. Obviously you only use waste sheets that are comparable in size, grammage and coating to the job you are currently printing. Hence we have a racking system that sorts make ready waste into the appropriate categories for reusing on jobs with the same paper specifications. It could be argued that because our process makes every effort to reuse the make ready stock as many times as possible we could in fact be more efficient than a waterless printer who doesn't have the same dedication to reusing these waste sheets. If the waterless printer was as efficient then at the very least the difference in paper usage would be negligible.

### Print Quality

Waterless printing claims superior quality due to sharper printing, and better saturated colours. Unlike conventional lithographic printers we do not use alcohol so the colour of our inks are brighter and we have better drying time. Waterless printing has a slight edge in this regard but the difference is negligible and most likely indiscernable to anybody but a print professional looking for a quality difference under an eye glass.