

Trend toward one-steps like 2 in 1 fountain solution

In an effort to keep up with faster turnaround and quicker make ready on press, as well as a general decrease in highly skilled press operators, fountain solution manufacturers are now promoting one-step formulations over the more popular two-step products.

"Do printers want a two-step formulation that involves mixing and dosing fountain solution and alcohol replacement, or a one-step formulation that has everything combined," asks Brian Moore from B.M.Management cc "A two-step formulation is susceptible to improper mixing, has more variables, and can be slower while the one-step fountain solutions offer ease of mixing and more control. It really is up to the printer."

In regular use for almost 10 years in the Southern Hemisphere it has proven that the use of less water in the printing process (up to 25% min.) also helps in reducing Calcium build up also!

There have been more problems recently since the introduction of alkali paper (to increase the brightness) especially when combined with hard water. There are certain Calcium reducing solutions on the market to answer the problem of calcium build-up, caused by hard water and the increased use of alkaline papers. Calcium build-up, in the form of white glaze, robs rollers of their printability and eventually causes stripping and complete loss of productivity. **However when using 2 in 1 fount** it not only has the buffer system to combat the higher pH in hard water areas but has a long track record of not leaching out the Calcium Carbonate in the paper coating (again provided the water is greatly reduced on the press) thus reducing the Calcium build up and eliminating the need for extra solutions.

Less-toxic products

B.M.Management also market B2006 (largely for web printers and NOIPA fount for continuous stationery) which are based on propylene glycol derivatives, which are less toxic than ethylene glycol base products. Each of these products offers different amounts of plate protection and wetting, which allows B.M.Management to differentiate the three products based on a customer's particular requirements.

They also market B2000 fount, designed to control blinding and stripping often associated with running coated paper, it incorporates **a strong** buffer system that allows it to be used in all the hardest water areas. The dosage, says the manufacturer, can easily be adjusted for use on dampening systems like Heidelberg Alcolor.

"Many fountain solutions are marketed as a one-step," says Brian Moore, Research Chemist and owner of B.M. Management "But we find that in practice that apart from 2 in 1 fount most of the supposedly one step alcohol free actually still require alcohol to be mixed We designed 2 in 1 fount with the widest latitude possible."

Over 100 formulas are available

"We custom formulate for individual customers," says Brian "plus we have a substantial R&D department and offer more than 100 formulas. When our customers need our help, we're there with our expertise. We have major presence in the industry in South Africa, and are expanding rapidly in Australia New Zealand and more recently U.K."

2 in 1 fount requires no alcohol to be added to the press

The pH 5 acid-based concentrate is also designed to keep plastic and polyester plates running clean. The one-step product requires no alcohol or alcohol replacers. It controls ink feedback and produces "excellent" results on a wide variety of dampening systems, including Dahlgren, Epic, and Heidelberg Alcolor.

The key to the 2 in 1 fount formulation is to not hurt the computer-to-plate material also, this makes it an extremely versatile product. A lot of one-step fountain solutions work for a limited time, then begin to attack and dissolve the photopolymer plate and cause build up on the blanket.