

Tech Talk From



Tech Talk #3

HIGHER PH FOUNTAIN SOLUTIONS And The Calcium Dilemma

In **Tech Talk #1** we discussed calcium problems and their impact on lithographic printers. Let's consider another potential option for managing these problems: **higher pH fountain solutions**.

Traditionally, U.S. and Canadian printers have printed with press chemistry measuring below 4.5 pH. Some paper companies have recommended a change to fountain solutions providing pH from 4.8 to 5.5. In this pH operating range, the amount of calcium is more likely to be controlled—mostly because its primary source, the calcium carbonate filler in the paper, is not as soluble in the press chemistry. It tends to stay in the paper rather than causing piling or feedback.

Higher pH fountain solutions are quite common in Europe, where calcium carbonate has long been a major paper component. Printers' Service, through active European marketing efforts, currently sells these types of fountain solutions in the United Kingdom, France, Spain and other countries—but this approach is extremely new in the U.S., and careful monitoring is critical.

Our line includes one- and two-step type products for both web and sheetfed applications, and has solvent-based as well as solvent-free solutions. The desensitizing system, charged with keeping the plate's non-image area free of ink, has been specially formulated to work well in the 4.8 to 5.5 pH range. Many of the products are "universal" types, designed to remain within a narrow pH range despite wide variations in water quality, with hardness and alkalinity varying from 0 up to 500.

With these fountain solutions, we have prevented ink drying problems. In addition, we are particularly pleased that our solutions are currently running quite well on Duotrol-dampened heatset web presses, without feedback or piling, thus confirming effective ink and water balance.

These fountain solutions are standard products and are available for sale in the U.S. and Canada. Just like in the U.S., our lineup is constantly revised and expanded to fit changing market needs. Because each installation requires fine-tuning, **it's important that you discuss your application** with your Prisco representative.

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As always, your local PRINTERS' SERVICE office is happy to answer your questions:

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