

## What is roller glazing ?

Are you using the right deglazer to effectively remove calcium from your press? This may seem like an odd question to ask a press operator. A good brand-name deglazer should do the job, right? Not necessarily. With all the changes that have been made to the paper in the last 10 years, it is crucial to understand exactly what is happening on press and what a deglazer should be doing for you. Let's break-down what glaze is. Glaze can form and accumulate from 4 primary sources:

1. From the paper.
2. From the ink.
3. By-products from the fountain solution and/or an alcohol substitute.
4. Sealing gum and chemistry picked up from new plates.

A good deglazer should be able to clean what is water-soluble (sources 1, 3 and 4) and what is solvent soluble (source 2).

One of the biggest changes in our industry has been the introduction of alkaline-based paper to replace acid-based paper. There have been many reasons for the change (environmental issues, use of less wood fibers for identical paper tonnage, increased levels of fillers such as calcium carbonate which increases brightness of the sheet) and there have been many issues printers have had to address because of it.

One of the most notorious problems has been the effect of calcium coming off the sheet and being introduced into the printing process. Here are some of the most common problems caused by calcium contamination.

- Plate blinding or ink walking off the plate (dot blowout)
- Premature plate wear
- Poor ink transfer down the ink train
- Inconsistent ink/water balance causing colour variation throughout the press run
- Reduced drying time
- Hardening of the rollers
- Premature roller wear
- Picture framing on the blanket, especially running a short sheet
- Build-up on the impression cylinder

There is really no way of stopping calcium from coming off the paper. Let's go through what actually happens as you start your press and paper passes through it.

1. Calcium (whiteners, chalk and fillers) leaves the surface of the sheet and is released onto a humid blanket.
2. From the blanket, it transfers to the plate and dissolves from a powder to a liquid because of the fountain solution on the plate.
3. At this point, the liquefied calcium touches the dampener form and ink form rollers.

(continued on the next page)



### **What is roller glazing ? (continued)**

4. On the dampening side, it transfers from the dampener form back onto the pan roller and into the tray and then back into the recirculation unit. For those of you without a recirculation unit, it sits in the tray and accumulates.
5. On the ink side, it touches the ink form rollers and starts to contaminate the rollers all the way up the ink train.
6. When the press is not running, the calcium in the rollers dries and then crystallizes.

What's the end result of all this? You now have a glaze that is literally locked into the pores of your rubber due to the crystallization of the calcium. How do you remove the contamination from your press and control it? Use **Uni O.D. Deglazer!**