



Tech Talk

From

Prisco®

Tech Talk #4

ROLLER MAINTENANCE: A PRESSROOM PERFORMANCE SEMINAR

At Printers' Service, one way we add value to your business is by helping you train your personnel and improve the performance of your presses. Because we deal—in depth—with so many printers, we've had the opportunity to develop programs that solve their problems. Printers' Service has developed a series of seminars to help you run your pressroom more efficiently and productively. Each one is tightly focused on a specific pressroom issue, so it doesn't take a major commitment in your time to generate process improvements — and that means **savings to your bottom line!**

Why should I be interested in a Roller Maintenance seminar?

In this seminar, we address "Roller Maintenance". Why should we focus on rollers? Press chemistry performs at its peak efficiency when the rollers are set properly and are clean and glaze-free. When you eliminate this variable, you have eliminated one potential reason for poor-quality printing.

What causes roller problems?

Rubber rollers are manufactured with "hills and valleys" ground into their surface, so that the ink transfers easily down the roller train to the plate surface. To check their condition, use your senses of sight and touch. Rollers should have a dull, velvety appearance, and they should feel velvety smooth as you drag your finger across the roller's surface.

If the rollers look shiny and have a glassy smooth feel to them, they are glazed. When rollers are glazed, their surface cannot transfer ink effectively. This means that you'll need to run more ink and water on the press to achieve required ink densities. Higher levels of ink and water can result in dot gain, mottled solids, hickies, ink drying problems, reduced quality, and most likely, increases in your spoilage or unplanned waste.

What are the sources of glaze?

There are actually four types of glaze that can appear on your rollers:

- **Aqueous glaze:** paper dust and lint, residual gum and dried fountain solution. This type of glaze is removed by **D-Glaze** during the cleaning process.
- **Glaze from ink and varnish:** residual resin, waxes and pigment from ink and varnish; this is removed by the solvents in our standard blanket and roller wash products.
- **Solvent-derived glaze:** residual fountain solution and ink solvents as well as solvents from poor quality roller washes; this type glaze is also removed by our blanket and roller wash products

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- **Salt-related glaze:** calcium carbonate fillers from alkaline paper, calcium from tap water and certain pigments (especially red ink pigments) and calcium citrate that can form from use of a citric acid-based fount. Hardness minerals from tap water can also contribute. Our decalcifying rinse products (**Alkaline Paper Roller Rinse, Crystal Clear and Crystal Clean Gel**) all remove these glaze components.

How do I remove these glaze components?

We'll demonstrate the use of several Prisco products, including **D-Glaze** and a decalcifying rinse product, as well as the press wash that is right for your press and your running conditions. You'll be able to see for yourself the amount of residue that comes out of the rollers onto the wash-up blade.

After rinsing, the rollers should appear dull and most of the pigment stain should be gone. The rollers may or may not be velvety-smooth to the touch and have increased drag: that depends on the age of the rollers and just how badly glazed they were.

Repeated use of this deglazing procedure will continually improve your rollers' condition.

Step-by-Step Three Part Roller Maintenance Procedure

1. Wash up rollers if they're still inked up.
2. Back off wash-up blade and apply **D-Glaze**. Idle the press for 3 to 5 minutes.
3. Engage the wash-up blade, and rinse the rollers with your usual Prisco roller wash.
4. Rinse the rollers with warm water.
5. Apply one of our decalcifying rinse products to the rollers. Idle the press for 3 to 5 minutes, and then engage the wash-up blade.
6. Again, rinse the rollers thoroughly with water.
7. Then, rinse with roller wash.
8. Apply **Eezy Klene** to the rollers and idle the press for 3 to 5 minutes. Engage wash-up blade, rinse with roller wash and then rinse with warm water.
9. Now, check your roller stripes, especially the ink forms to the inside vibrator. Be careful and consistent in your settings. Compare the accuracy of these settings to being "in the infield" instead of just "in the ball park"! Careful, accurate settings will give the pressmen greater latitude, making the press easier to control while improving its consistency and quality.
10. Check durometers to confirm that your rollers have the appropriate hardness measurement. Replace any that are too hard or in poor physical shape. Stripe any rollers that were replaced.

For rollers with an extreme deposit of calcium, remove the rollers from the press and hand clean with **Prisco Salt Crystal Remover**.

Thanks for the opportunity to present this seminar to you and your pressroom team. We look forward to sharing more programs like this one.

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

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