



## **ROLLER CONTAMINATION?** Fix it Now OR Pay For It Later Later Never Comes At A Good Time!

### **THE PROBLEM:** Cause and Effect (Imbalance of Control / Quality)

#### **Paper**

(Calcium Carbonate fillers, lint, coatings) Calcium, paper lint & coating circulate through the fount recirculation system neutralizing the fountain solution, causing plates to become sensitive and the need to increase water speeds to keep plates clean. Calcium build up on the rollers causing roller hardening. This alone causes all over or area specific ink / water imbalances that show up during press runs! All of this shortens the life of fountain solution, creating issues from plate sensitivity, plugging or running at higher water speeds.

#### **Ink**

Ink can break down from materials used in fountain solutions. As ink breaks down (over emulsifies), varnishes, solvents, pigments, cobalt and manganese driers leach out into the fountain solution weakening the fountain solutions benefits. Some inks may have calcium in them, causing a Fount / pH weakening and conductivity drift.

When this happens we usually see the color of the fountain solution water is starting to become the same shade of ink being used.

#### **Solvents**

Metering cleaners and washes can drip into the fountain solution & recirculate throughout the entire fountain solution recirculation system. Roller wash may be alkaline or contain wetting agents / surfactants & therefore weaken the fountain solution. Surfactants contained in washes and not thoroughly removed during press wash up will often build up within the roller train, eventually working its way onto the plate image causing the image to attract water and not ink, known as Image Blinding. Surfactants also cause inks to over emulsify causing toning, fill in and more.

### **THE SOLUTION:**

Prevention & Remedy (Routine Maintenance)

### **THE TOOLS:**

System Kleener Powder, Blast, Relief, Muck Trapper

#### **Step 1 (Fountain Solution System):**

Once a month add our **System Cleaner Powder** directly to the dirty fountain tank water & allow to recirculate for 20-30 minutes. This cleans out the entire fountain solution recirculation system including; fountain tanks, fountain pans and the recirculation return lines. It also shocks and re acidifies the fount system.

#### **Step 2 (Filtration):**

Put our **Muck Trapper Filter** into a clean recirculation tank. Muck Trapper is a dual gradient filter. In fact, at 4" X 9" with "1/2" thick walls, it will last for months in picking up both tiny & larger contaminants and trapping them within the walls. Last 90 days or more, depending on housekeeping.

#### **Step 3: Rollers:**

Deep clean to remove calcium and surfactants: While the fount solution recirculation system is being cleaned as in #1 above, deep clean ink rollers with our **Blast** so they are ink and glaze free. Once rollers are clean, squirt **Relief** to remove all the calcium and surfactant build up.

