

WHY DRUM LUBRICATION IS CRUCIAL

By Mike Josiah and the Technical Staff at UniNet

The contact areas of an OPC drum and wiper blade have the highest friction points in a toner cartridge. By design, a wiper blade will lightly stick to the drum surface. Then as the drum rotates, the blade slips and glides along the drum cleaning any residual toners off. If for any reason the wiper blade does not slip and glide, it will grab onto the drum surface and can start to fold over causing what we call wiper blade flipping. When a wiper blade flips the blade is damaged, but the drums coating can also be damaged. The cartridge will then make a horrendous banging noise in the printer; not something a customer ever wants to hear. Therefore, proper drum and blade lubrication is the key to eliminating this issue.

Years ago when the industry was young, Zinc Stearate was the powder lubrication of choice. Over time the limitations of the product became more pronounced as printer speeds rose and PCR's were introduced. The large particle size of Zinc Stearate, and a tendency to stick to the PCR caused it to fall out of favor.

Then, Kynar was introduced to replace Zinc Stearate, and is still used on some cartridges today. It has a smaller particle size and does not stick to the PCR like Zinc Stearate does. This worked for years, but the printers kept getting faster, and Kynar reached its limit.

In summary, there are other powdered lubricants available out there, and for the most part they work OK (one is even made from crushed rocks); however, the newer high speed printers needed a much better product for increased performance.

UniNet introduced the **SuMMiT® Maestro™ Lubricating Powder** to help solve blade flipping on all printers regardless of their speed. The **SuMMiT® Maestro™** Powder contains Teflon-like chemicals, finely ground to create a very slick surface when applied to the drum and wiper blade surfaces. Even at the high speeds of today (some drums run at 180 revolutions per minute!), **SuMMiT® Maestro™** Powder stays on the wiper blade, keeps the blade from grabbing and still allows the cleaning process to take place properly. It also does not stick to the PCR just like some of the older lubricants do.

If you're looking for just one lubricating powder for your production line that covers any cartridge regardless of speed... UniNet's **SuMMiT® Maestro™ OPC Lubricating Powder** is the one, and the right solution!