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CARE & HANDLING GUIDELINES FLEXOGRAPHIC PLATES, SLEEVES & ROLLS

General storage and handling of incoming flexographic printing plates and rolls is important to “shelf life” and quality results on press. The following guidelines apply to laser engraved rubber plates, continuous design rolls, and traditional rubber and photopolymer plates. Here are some things to keep in mind.

- ✓ New plates and rolls should remain in their **original packaging** as delivered by the supplier or in-house plate-making area until ready for use. All Flexographic plate materials are susceptible to ozone attack. Leaving plates unprotected and exposed can cause fine lines and cracks to develop on the surface of the plate.
- ✓ **Ozone** is always present in the atmosphere where it is created by the action of ultraviolet light on oxygen. In printing environments ozone levels are very high because electrical motors generate ozone when operating.
- ✓ Plates should be cleaned and thoroughly dried before storage. Make certain clean-up solvents and cleaning agents are compatible with plate materials. A solvent compatibility guide is available from **Midwest Imaging and Roller Services**.
- ✓ Plate storage areas should not exceed **100° F (38°C)** and should be located away from power stations, press motor drives and corona treating units.

Other contributing factors influencing life a printing system used:

- ✓ Type of plate material
- ✓ **Type of ink/coating being used**
- ✓ Solvent type or pH of water-based inks or coatings
- ✓ **Plate mounting material**
- ✓ Plate cylinder and anilox roll concentricity
- ✓ **Anilox roll surface characteristics**
- ✓ Substrate surface characteristics
- ✓ **Plate de-mounting techniques**
- ✓ Plate cleaning methods
- ✓ **Type of plate cleaner used**
- ✓ Length of press run
- ✓ **Gear pitch line**
- ✓ Impression settings
- ✓ **Harmonics (bounce)**
- ✓ Plate processing conditions
- ✓ **Press speeds**

We recommend reviewing all these areas and understand how to **control** them.

Midwest Imaging and Roller Services has a scientific study conducted by one of our rubber suppliers that explains in greater detail the cause and effects of ozone on plate materials. We will be happy to provide this and participate in plant production meetings to encourage good housekeeping practices.