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How to Select a Flexographic Mounting Tape

Improvements in flexographic printing allow more colors, gearless presses, increased control over anilox ink loads and more. Choosing the right mounting tape can help you take the most of advantage of all these possibilities.

Day by day, the quality of flexographic printing continues to improve. We particularly see this as flexible packaging that was previously done on other systems is now printed using flexo. This new level of industry participation is due to technology developments around all the elements involved in this process.

The possibility of printing using a greater number of colors, gearless press technology, substantial advances at the mounting level, better definition of dot printing by the elaboration of digital photopolymers and high pigmentation inks, increasingly controlled ink load in the cells of the anilox and the possibility of having several tape densities according to the work to be printed all allow a better control of the dot gain and therefore greater consistency as compared with other types of printing.

Speaking specifically of flexographic mounting tapes, we must clarify that these joining elements not only affix the plates to cylinders or sleeves, but also the adhesive on the plate side presents excellent performance to avoid edge lifting and improve press speeds.

It is important to clarify that a mounting tape can affect several aspects of flexo printing:

1. Registration
2. Machine speed
3. Photopolymer wear
4. Printed dot size
5. Pressure adjustment in the machine

Therefore, it is important to evaluate the following aspects when choosing the right mounting tape:

- **Ease of application** of the tape on cylinders or sleeves – there are tapes that facilitate mounting, reducing the total time for this operation

- **Elimination of bubbles** between the photopolymer plate and the mounting tape – air bubbles between the photopolymer plate and the tape generate a defect during printing that causes machine stops, downtime and waste costs
- **Edge-lift of the photopolymer** from cylinders or sleeves – when lifting occurs the photopolymer plate marks the printing substrate, generating lines or print defects; choosing a tape that has good adhesion balance is the best way to eliminate this problem
- **Uniformity in the caliper** of the tape – this factor is definitive for printing registration
- **The resilience of the foam tape** – a tape that resists compression makes it easy to run jobs at higher speeds while maintaining print quality
- **A complete portfolio of products** – different foam densities allow different types of printing with excellent quality, for example solid backgrounds or lines, a combination of printing, process or halftone
- **Chemical and mechanical resistance** of the tape to solvents in the ink and to press effects – this helps reduce the possibility of photopolymer lifting
- The tape must allow the photopolymer plate to be **easily removed** – this reduces the possibility of damaging the plate
- The tape must allow **the elimination of air bubbles** between the plate and the tape even after several days of being stored waiting to go on the press – this reduces reprocessing caused by demounting and remounting due to tapes that have poorer adhesion

As you can see, the flexographic mounting tapes are fundamental elements in flexographic printing and, like any printing variable, press tests must be carried out to verify product performance. We hope that the characteristics that must be met by the flexo tapes cited above help the people in charge of printing to select the best alternative and thus continue with the main press responsibility of generating quality and consistency at low cost.

Important notice:

The values presented above have been determined by standard test methods and are average values not to be used for specification purposes. Our recommendations on the use of our products are based on tests believed to be reliable but we would ask that you conduct your own tests to determine their suitability for your applications. Please take all safety and occupational health and safety regulations into account when using this product. All questions of liability relating to this product are governed by the terms of sale subject, where applicable, to the prevailing law.



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