3M

Solutions for Plate Lifting

Flexographic Mounting Systems

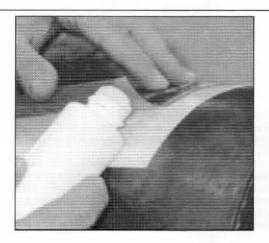
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Technical Bulletin

Description

Plate lifting can be a major cause of press downtime. Along with proper mounting techniques and use of 3M[™] Cushion-Mount[™] Plus Tapes, there are additional means to prevent plate lifting. 3M has developed techniques to increase adhesion and to provide an edge seal, both aimed at preventing plate lifting.

Primer 94 Dauber Application Instructions



3MTM Tape Primer 94 can be applied under the lead and trail edge of a photopolymer plate to increase the tape adhesion to the plate when plate lifting is a problem. Use on small repeat length cylinders, thick plates, or long runs to reduce the chance of plate lifting in press. Tape Primer 94 is available in a 3.5 oz. re-cappable bottle. 3M Tape Primer 94 can also be used to increase adhesion of 3M Cushion-Mount plate mounting tapes to cylinders and sleeves.

Surface Preparation:

The bonding surface must be clean and dry. Contaminated surfaces should be cleaned with a 50:50 mixture of isopropyl alcohol and water.*

* Note: Follow manufacturer's precautions and directions for use when handling solvents.

Application:

Shake Tape Primer 94 well before using. Apply a thin, uniform coating to the bonding surface. Allow Tape Primer 94 to dry thoroughly before applying tape. This is usually accomplished in 5 minutes at room temperature. The 3.5 oz. re-cappable bottle applicators are reusable and easy to use during plate mounting or on-press.

Clean up:

Bonding areas covered with Tape Primer 94 will have adhesive residue once the plate is removed. To clean these areas use isopropyl alcohol to wet and soften the adhesive. Scrape adhesive off with a thin plastic tool, rub/roll-off with thumb, or use masking tape to remove adhesive residue.

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Plate Edge Sealing Application Suggestions





Press inks and cleaning solvents can penetrate the printing plate and mounting tape interface, weakening the adhesive bond, resulting in plate lifting.

Jet Melt Adhesives: 3M[™] Jet-Melt[™] Low Melt Adhesive 3792 can be applied to the perimeter of the plate to form a seal between the tape and plate. Use the 3M[™] Polygun[™] LT Applicator with an optional Quadrack[™] Converter Palm Trigger and the 9922 or 9785 applicator tip to deliver a thin bead of adhesive. To get a thinner bead, the tip can be ground at an angle. Alternate adhesives are 3762-LM and 3776-LM.

Jet-Melt low melt adhesives cool quickly and can be removed easily by peeling, leaving a clean area to reapply. These adhesives are solvent free and are ready to go out to press immediately.

Single Coated Industrial Tapes: 3M Aluminum Foil Tape 425, Vinyl Tape 471, and Polyester Tape 850 can be used as a barrier to help prevent ink and cleaning solvents from penetrating between the plate and mounting tape.

Technical Information and Data

The technical information and data, recommendations, and other statements provided in this brochure are based on tests or experience which 3M believes to be reliable, but the accuracy or completeness of such information is not guaranteed.

Product Use

Please remember that many factors can affect the use and performance of a 3M product in a particular application. The materials to be used with the 3M product, the surface preparation of those materials, the product selected for use, the conditions in which the product is used, and the time and environmental conditions in which the product is expected to perform are among the many factors that can affect the use and performance of a 3M product. Given the variety of factors that can affect the use and performance of a 3M product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for the user's method of application.

Limited Warranty and Limited Remedy

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(ISO 9002)

This Industrial Tape and Specialties Division product was manufactured under a 3M quality system registered to ISO 9002 standards.

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Industrial Tape and Specialties Division

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