

The Invisible Force Behind Smart Labels: Transfer Tapes in RFID

Radio-frequency identification technology is revolutionizing how we track and manage assets, inventory, and people. But what holds those tiny RFID dry inlays securely in place? The answer is transfer tapes.

Bridging the Gap Between Inlay and Label

RFID dry inlays are essentially tiny electronic circuits with an antenna that transmit data wirelessly. Because it lacks an adhesive layer and isn't pre-cut, a dry inlay offers incredible flexibility. To become functional labels, these inlays need to integrate seamlessly into a label construction. This is where transfer tapes come in.

How Transfer Tapes Enhance RFID Labeling

Transfer tapes turn almost any material into a high-performance, pressure-sensitive label. A transfer tape consists of a precise layer of adhesive held between two release liners. During the conversion process, a label printer removes one liner and laminates the adhesive directly onto a facestock or a dry RFID inlay.

- **Secure Attachment:** Transfer tapes provide a reliable bond between the RFID dry inlay and the label's face material, ensuring the inlay stays in place throughout its lifecycle.
- **Thin Profile:** Transfer tapes are incredibly thin, allowing you to create slim, flexible RFID labels that apply easily to a wide range of surfaces without adding bulk.
- **Protection and Durability:** The adhesive layer acts as a protective barrier for the delicate inlay, shielding it from damage caused by moisture, abrasion, or other environmental factors.
- **Design Flexibility:** Transfer tapes enable the creation of custom RFID label shapes and sizes, accommodating different inlay designs and unique application requirements.
- **Streamlined Production:** Using transfer tapes simplifies the RFID label manufacturing process, allowing for efficient and high-speed production.

The Advantages of Combining Dry Inlays and Transfer Tapes

Using transfer tapes with dry inlays opens up new markets for RFID technology by giving brand owners and label converters the tools to build functional, durable, and highly customized smart labels.

This combination offers significant advantages. It allows you to select specialized, heavy-duty adhesives for superior performance on challenging or contaminated surfaces and in extreme conditions, such as freezing temperatures or high heat. This ensures the RFID tag remains securely attached and functional throughout the product's lifespan. Additionally, this approach provides greater flexibility, enabling complex shapes and easy, residue-free removal when needed—options not typically available with standard wet inlays.

The Advantage of One Supplier for Transfer Tapes and Inlays

Avery Dennison's extensive portfolio of transfer tapes and engineered solutions perfectly complements our advanced RFID offerings. Our transfer tapes ensure your dry inlays adhere exactly where they need to, under the precise conditions your application demands. We empower you to move beyond standard cardboard boxes and bring RFID tracking to complex, hard-to-label items. By leveraging our deep expertise in adhesive formulation and RFID technology, you never have to compromise on label performance or longevity.

Don't let challenging surfaces or harsh environments limit your tracking capabilities. Explore Avery Dennison's transfer tape portfolio and dry inlays today.

label.averydennison.com

05/2026

All Avery Dennison statements, technical information and recommendations are based on tests believed to be reliable but do not constitute a guarantee or warranty. All Avery Dennison products are sold with the understanding that purchaser has independently determined the suitability of such products for its purposes. All Avery Dennison products are sold subject to Avery Dennison's general terms and conditions of sale found at label.averydennison.com/en/home/terms-and-conditions.html.

© 2026 Avery Dennison Corporation. All rights reserved. The "Making Possible" tagline, Avery Dennison and all other Avery Dennison brands, product names and codes are trademarks of Avery Dennison Corporation. All other brands or product names are trademarks of their respective owners. Fortune 500® is a trademark of Time, Inc. Branding and other information on any samples depicted are fictitious. Any resemblance to actual names is purely coincidental.



MAKING POSSIBLE™