



Linerless labels

REVOLUTIONIZING THE LABEL INDUSTRY



- Bostik Adhesive
- Facestock/paper
- Release coating

Linerless Label Technology

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There is a potentially disruptive approach to pressure sensitive labeling that is revolutionizing the industry. The concept of a roll of tape has been reapplied to pressure sensitive label technology. Rolls of labels are being produced without the need for a separate release liner. Silicone is coated directly on the outer side of the facestock. It functions as the release surface after the adhesive is coated on the inner side and rolled up on itself. Linerless labels are a growing trend that offers some significant advantages, not only for label converters, but also for companies that use pressure sensitive labels.

Elimination of the release liner brings opportunities for cost savings as well as manufacturing efficiencies and material waste reduction. Traditional silicone release liner represents 45% of the cost of a standard label.¹ While there still is a need for silicone with linerless technology, the potential for material cost reduction is readily apparent. Transportation and warehousing costs can be reduced by as much as 50% because removal of the liner allows up to twice as many labels on a roll.² This also enables manufacturing efficiencies by cutting the number of roll changes in half.² Finally, the release liner accounts for 40% by weight of a traditional label construction, which means that linerless technology can significantly reduce the amount of liner waste going to landfill.¹

Additionally, narrow web converters now have the capability to produce linerless labels, which makes the technology more accessible and is contributing to its growth. Historically, the largest market for linerless labels has been Variable Information Printing, also known as VIP labels. These types of labels can be thermal transfer printed, although direct thermal printing is the fastest growing print technology. The majority of linerless labels have been used in the fresh food industry as weight scale labels, for example. Logistics is another area where the use of linerless labels has continued to grow. Applications include warehouse inventory control through the use of portable printers, as well as shipping labels with automated labelers that can adjust to boxes with different dimensions.³

However, it should be stated that linerless technology is not without its challenges. In the food industry, for example, the products being labeled can be frozen, refrigerated, or heated. This means that the pressure sensitive adhesive needs to be selected with the end-use requirements in mind. With linerless labels, the facestock not only is coated with adhesive on one side, but it must also function as a release surface on the opposite side. Care must be taken to ensure that the silicone and adhesive are compatible to provide the proper release, particularly with automated dispensing. Furthermore, the adhesive



will come into direct contact with the rollers on the printer. Adhesive tack needs to be optimal not only for the end-use application, but also for smooth operation through the printer.

It is important to partner with an adhesive supplier who has experience with linerless label technology and who takes time to understand the unique needs of each situation. Hot melt adhesives can be formulated to perform under a wide range of temperature conditions, so a knowledgeable vendor can help you determine which adhesive is best for your application. Experienced suppliers can evaluate release performance for you to help optimize the processing on your converting line. With the different types of printers that may be used, it is invaluable to partner with a company willing to work with you to ensure that the adhesive tack does not affect the dispensing of your labels.

To remain competitive in the label market, the potential cost savings achievable with linerless technology can be very attractive. In addition to reducing cost, many companies are focused on being good corporate citizens of the environment. The reduction of waste through elimination of the release liner in linerless label technology supports these initiatives.

Opportunities in linerless labels are growing, and the evolution of coating and printing equipment is making it more feasible for the narrow web converter to participate in this space. Hot melt adhesives for linerless labels are a proven solution, so working with an adhesive supplier who can help you through the start-up phase will enable you to take advantage of the benefits of linerless label technology.

Linerless label technology is one example of how adhesive manufacturers are adapting to our ever-changing world. While this technology is not yet widespread in the market, its ability to save companies money, boost efficiency and help the environment likely will make it a trend to watch in our industry.

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