

# The Use of UV curing for converting and siliconizing

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**M**anufacturers involved in wideweb converting and siliconizing rely on UV curing because it offers a powerful combination of speed and performance. In addition to enabling significantly higher production rates, UV curing technology enhances the functional properties of the finished materials. Just as importantly, UV curing makes it possible to process inks and coatings on heatsensitive substrates, giving converters greater flexibility in material selection.

For this reason, UV curing is used across a broad spectrum of converting applications, from hard coats on film products and decorative foils to laminating adhesives and siliconebased coatings on paper, films and foils for both intermediate and finished goods. The technology delivers high, reliable output with long operational life and uniform curing across the entire web. This consistency over time is essential for maximising production speeds while minimising waste, defects and downtime—key advantages for today's highthroughput manufacturing lines.



## APPLICATIONS

Converting technologies support improved ink receptivity on packaging films and paper, enabling higherquality printing and better adhesion. Converting is also critical in curing laminating adhesives used to bond filmtofilm,

filmtofilm and filmtopaper structures, producing strong, stable multilayer materials.

For scratch and chemical resistant topcoats on window films, as well as films and papers for electronics, medical and optical applications, these coatings help improve durability and performance in demanding environments.

Protective coatings such as scratch, stain and moisture-resistant coatings to decorative foils and papers are commonly used in readytoassemble furniture, picture frame profiles, cabinets and store fixtures made from MDF or particle board, where enhanced surface resilience is essential.

UV curing can also be used for silicone release liners and transfer papers for specialty applications, such as composites, medical, building materials and electronics, in addition to the more traditional label and converting applications.

Hydrogels used in transdermal patches and other medical applications represent another important converting area, where controlled coating and curing processes ensure consistent performance.

