

Press Release

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Kiss Cutting PETG Sleeves on Glass Bottles

A trend in the packaging industry is to encase glass or plastic containers in a pre-formed, full-body PETG (glycol-modified polyethylene terephthalate) shrink sleeve. These sleeves are easily printed with colourful logos or labelling information and can even extend up around the cap for added tamper protection.



The customer request involves a twist on a common CO₂ laser application—kiss-cutting self-adhesive labels away from a coated paper liner. The unique requirement in this case was to kiss-cut a decorative pattern after the 4.5-mil PETG sleeve is formed around the glass bottle.

To perform this operation, a Synrad laser was set up and an FH Series marking head equipped with a 125 mm focusing lens. This 125 mm lens provides a 180- μ m (0.007") spot size with a 3 mm (0.118") depth of focus. Using WinMark Pro, a 2.60" x 1.44" ellipse was created, and then set a *Power* level (duty cycle percentage) corresponding to 25 watts and a *Velocity* of 45 inches per second. At these settings, the PETG sleeve was cleanly cut with no effect on the glass bottle. Cycle time for each cut is 0.20 seconds.

For this application the 4.5-mil PET-G sleeve was kiss-cut with a decorative oval shape.

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