Instructions for using a Curl Tester

Cut an "X" in the film about 3" long and place the curl tester on the film. The film will curl if there is a tension issue. Typically, there is a small amount of curl because of the different tensions on the films. You'll need to determine what is an acceptable amount of curl based on customer specs.

Curling of the sheet can happen with both one or two-sided lamination jobs. With two-sided lamination, curl is typically stretch-induced. This usually can be easily corrected by increasing or decreasing the unwind tension of either the top or bottom roll of film, depending on the direction of the curl. With upward curl, there needs to be less unwind tension on the top roll of film or increased tension on the bottom roll to effectively flatten the sheet. The opposite would be recommended with downward curl.

With a one-sided laminated job, curl is most commonly caused by stretch or moisture. Stretch induced curl can be controlled by several techniques, including lessening the unwind tension of the roll to decrease stretching the film; lowering the temperature to lessen elongation of the film that may occur due to overheating and the softening of the film; and adjusting nip pressure as the film is being laminated to the sheet.

In addition, if the machine is equipped with anti-curl devices such as a breaker bar, adjustments with this can help decrease curl. In many situations, a combination of several of these techniques is necessary to ensure a flat sheet.