

# LAMINATION OF THIN WEBS FOR PACKAGING

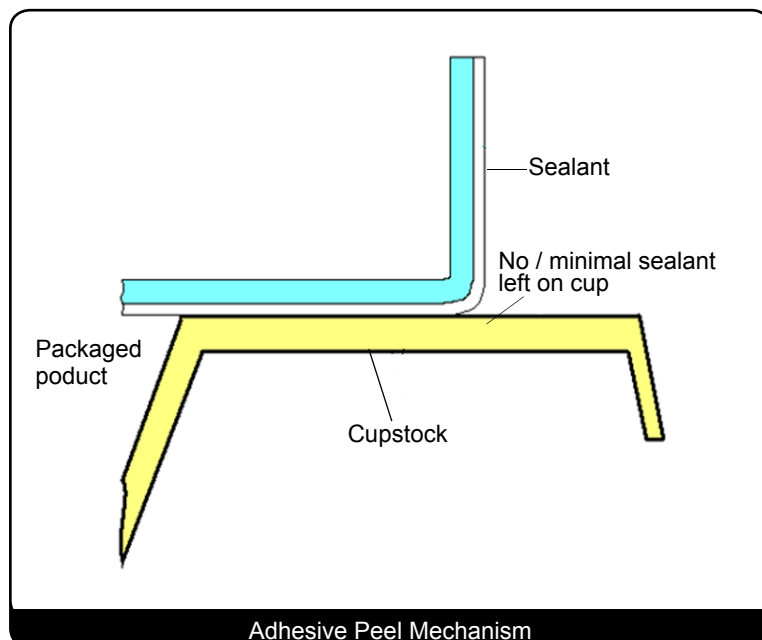
A Two Day Technical Seminar

## About the Seminar

Lamination of Thin Webs for Packaging is designed to give engineers and others an understanding of lamination processes and the properties of the resultant laminates utilized in flexible packaging. Monolayer flexible materials often fall short in delivering the needed properties. Lamination is an important technique utilized to combine materials to assure that the finished packaging materials demonstrate properties needed for packaged products. This two day seminar covers various lamination technologies, process variables, testing procedures, upstream and downstream processes and troubleshooting techniques.

## Who Should Attend

Personnel involved in the R&D, manufacture, testing, product development, process support, design, use and sales of multi-layer packaging who wish to jumpstart or round out their knowledge of lamination. Flexible packaging laminations are used in the food, pharmaceutical, medical device, consumer goods, and industrial goods industries. The seminar is intended to be an introduction into laminating technology for engineers and others who support, troubleshoot, specify, buy and sell flexible packaging laminations.



## Benefits

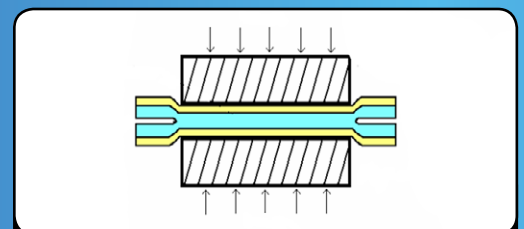
- ❖ Learn how physics and chemistry apply to achieving a good lamination
- ❖ Learn the layout of lamination equipment
- ❖ Learn techniques to troubleshoot lamination problems
- ❖ Learn the differences between lamination processes
- ❖ Learn about the what's needed upstream and downstream for successful laminates
- ❖ View the laminating process through technical data, graphs and formulas



Sealing Photomicrograph

## Course Concepts

- ❖ Wetting and its impact on adhesion
- ❖ Extrusion vs. adhesive lamination
- ❖ Rationale for lamination
- ❖ Bond testing
- ❖ Bond failure mechanisms
- ❖ Alternatives to lamination



Schematic of Pressure-Induced Flow During Sealing