

## Flow Analysis in Patch Slot Coating

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A numerical study was carried out to investigate the effects of physical properties on the slot patch coating dynamics. And also the optimum internal die and die lip designs have been suggested based on the simulation results. Actually, the flow control in patch coating is more difficult than in continuous case because of its time-dependent characteristics. Therefore this study has been focused on flow dynamics in the start-up and the end conditions. The effect of Newtonian and non-Newtonian properties of the materials in slot patch coating process has been examined. Numerical simulations have been performed using popular commercial computational fluid dynamics packages: Fluent and Flow-3D.