

Dynamic behavior of viscoelastic fluids in slot coating

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Slot coating process is mainly applied in IT industry, manufacturing flat panel displays and long life batteries. Coating liquids employed in this process, with micro/nano-sized particles and viscoelastic polymers, are seldom Newtonian, making systematic analysis of this process intricate. In this study, effect of viscoelasticity on the slot coating flow has been experimentally examined. Dynamics and coating windows by viscoelastic Boger fluid have been compared with those by Newtonian case.